

1.0 Reference and Address			
Report Number	SH10011256-001	Original Issued: 8-Feb-2010	Revised: 10-Feb-2026
Standard(s)	Household and Similar Electrical Appliances - Safety - Part 2-24: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances and Ice-Makers [UL 60335-2-24:2022 Ed.3+R:29Feb2024] Household And Similar Electrical Appliances, Part 1: General Requirements [UL 60335-1:2016 Ed.6] Household and Similar Electrical Appliances - Safety - Part 2-24: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances and Ice-Makers [CSA C22.2#60335-2-24:2022 Ed.3+U1] Safety of Household and Similar Appliances - Part 1: General Requirements [CSA C22.2#60335-1:2016 Ed.2]		
Applicant	Ningbo Hicon Industry Technology Co., Ltd.	Manufacturer 1	Ningbo Hicon Industry Technology Co., Ltd.
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2.0 Product Description	
Product	Ice Maker
Brand name	HICON, Antarctic Star, AGLUCKY, R.W.FLAME, Free Village, Kismile, Kndko, Joy Pebble, COWSAR, KISSAIR, Electactic, ZAFRO, WAA, Auseo
Description	The products covered by this report are Ice Makers for household use. They are cord-connected type with a recognized mold-on grounding plug and intended to be connected to 115V, 60Hz.
Models	HZB-12E, HZB-12EH, HZB-30D, HZB-20N, HZB-20AN, HZB-20BN, HZB-20CN, HZB-12N, HZB-15N, HZB-15NG, HZB-15NG/S, HZB-15NH, HZB-15NH/S, HZB-15DN, HZB-12NA, HZB-15NA, HZB-12NB, HZB-15NB, HZB-12N/S, HZB-15N/S, HZB-12NA/S, HZB-15NA/S, HZB-12NB/S, HZB-15NB/S, HZB-15NF, HZB-20DN, HZB-25DN, HZB-15EN, HZB-20EN, HZB-20FN, HZB-15EN-W, HZB-15N-W, HZB-15N/S-W, HZB-15NA-W, HZB-15NA/S-W, HZB-15NB-W, HZB-15NB/S-W, HZB-15NF-W, HZB-20EN-W, HZBY-12, HZB-15NG-W, HZB-15NG/S-W, HZB-15NH-W, HZB-15NH/S-W, HZB-15DN-W
Model Similarity	Model HZB-12E and HZB-12EH share similar construction and same compressor except for water adding method. Model HZB-12E need to add water manually, and HZB-12EH is connected to the water mains. Model HZB-30D share the similar construction with model HZB-12EH, except that HZB-30D has bigger appearance shape and size. Models HZB-20AN are same with HZB-20N respectively, except the outer apperance. Model HZB-20BN share the similar construction with model HZB-20N, except the outer appearance and the compressor. Model HZB-20CN is entended from HZB-20N, they share the similar construction and different appearance. Models HZB-*N, HZB-*NA, HZB-*NB, HZB-*N/S, HZB-*NA/S, HZB-*NB/S (*=12,15) share the same electrical construction, except the difference appearance and ice making capacity. Model HZB-20DN, HZB-25DN are extended from models HZB-*N (*=20,25) with different appearance and functions. Model HZB-15EN, HZB-15NF are extended from model HZB-15N, model HZB-20EN are extended from model HZB-20BN, they share the same electrical construction, except appearance. Model HZB-20FN is extended from HZB-20EN except for different appearance and the location of water container. Model HZBY-12 share the similar construction with model HZB-12E, except the difference appearance. Model HZB-15NH, HZB-15NH/S, HZB-15NG, HZB-15NG/S, HZB-15NG-W, HZB-15NG/S-W, HZB-15NH-W, HZB-15NH/S-W, HZB-15DN-W are extended from model HZB-15N, except that the overall dimensions and evaporator is smaller, the difference between HZB-15NH and HZB-15NG is the shape of enclosure. Model HZB-15DN share similar cooling system with HZB-15N but different construction. Models with "/S" have a stainless steel enclosure and models without "/S" have a plastic enclosure. Models follow by suffix "-W" means the unit add wifi module.

2.0 Product Description	
Ratings	HZB-12E, HZB-12EH: 115V, 60Hz, Ice-making current: 1.6A, Ice-harvest current: 2.0A, R600a, 0.74Oz/21g, equipped with compressor L48C5L, HV48Y11A, HD48Y11A; HZB-30D: 115V, 60Hz, Ice-making current: 2.3A, Ice-harvest current: 2.7A, R290, 1.62oz/46g, equipped with compressor QD32R11; HZB-20N, HZB-20AN, HZB-20DN, HZB-25DN: 115V, 60Hz, Ice-making current: 2.7A, R600a, 1.06Oz/30g, equipped with compressor L48C5L and UKN43YA; HZB-20N, HZB-20AN, HZB-20BN, HZB-20CN, HZB-20DN, HZB-25DN: 115V, 60Hz, Ice-making current: 2.5A, R600a, 0.81Oz/23g, equipped with compressor HV48Y11A, M43C5L, UKN43YA and HD48Y11A; HZB-20DN: 115V, 60Hz, Ice-making current: 3.5A, R290, 0.88Oz/25g, equipped with compressor QD32R11; HZB-12N, HZB-15N, HZB-15N-W, HZB-12NA, HZB-15NA, HZB-15NA-W, HZB-12NB, HZB-15NB, HZB-15NB-W, HZB-12N/S, HZB-15N/S, HZB-15N/S-W, HZB-12NA/S, HZB-15NA/S, HZB-15NA/S-W, HZB-12NB/S, HZB-15NB/S, HZB-15NB/S-W, HZB-15EN, HZB-15EN-W, HZB-15NF, HZB-15NF-W: 115V, 60Hz, Ice-making current: 2.7A (with AC ice pushing motor), 1.8A (with DC ice pushing motor), R600a, 0.57Oz/16g, equipped with compressor HV48Y11A, M43C5L, UKN43YA and HD48Y11A. HZB-20EN, HZB-20FN, HZB-20EN-W: 115V, 60Hz, Ice-making current: 2.7A (with AC ice pushing motor), 1.8A (with DC ice pushing motor), R600a, 0.74Oz/21g, equipped with compressor, UKN43YA and HD48Y11A. HZBY-12: 115V, 60Hz, Ice-making current: 1.6A, Ice-harvest current: 2.0A, R600a, 0.63Oz/18g, equipped with compressor L48C5L, HV48Y11A and HD48Y11A. HZB-15NH, HZB-15NH/S, HZB-15NG, HZB-15NG/S, HZB-15NG-W, HZB-15NG/S-W, HZB-15NH-W, HZB-15NH/S-W, HZB-15DN-W: 115V, 60Hz, Ice-making current: 1.8A, R600a, 0.53Oz/15g, equipped with compressor UKN43YA and HD48Y11A. HZB-15DN: 115V, 60Hz, Ice-making current: 1.7A, R600a, 0.53Oz/15g, equipped with compressor UKN43YA and HD48Y11A.
Other Ratings	High side pressure: 290 psig, low side pressure: 88 psig

3.0 Product Photographs

Photo 2.1 - Overall view - HZB-12E, HZB-12EH



01

Photo 2.2 - Overall view - HZB-12E, HZB-12EH



03

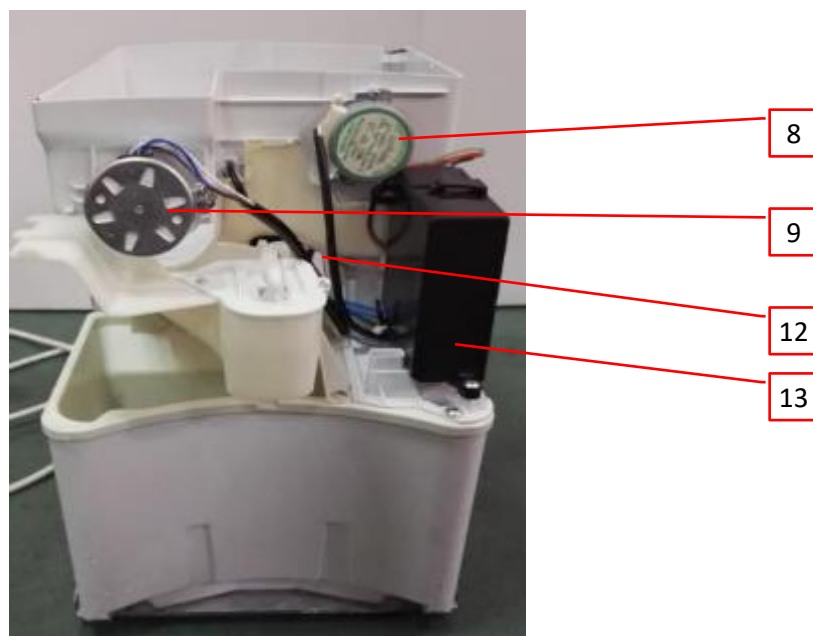
02

3.0 Product Photographs

Photo 2.3 - Internal view - HZB-12E, HZB-12EH



Photo 2.4 - Internal view - HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.5 - Internal view - HZB-12E, HZB-12EH

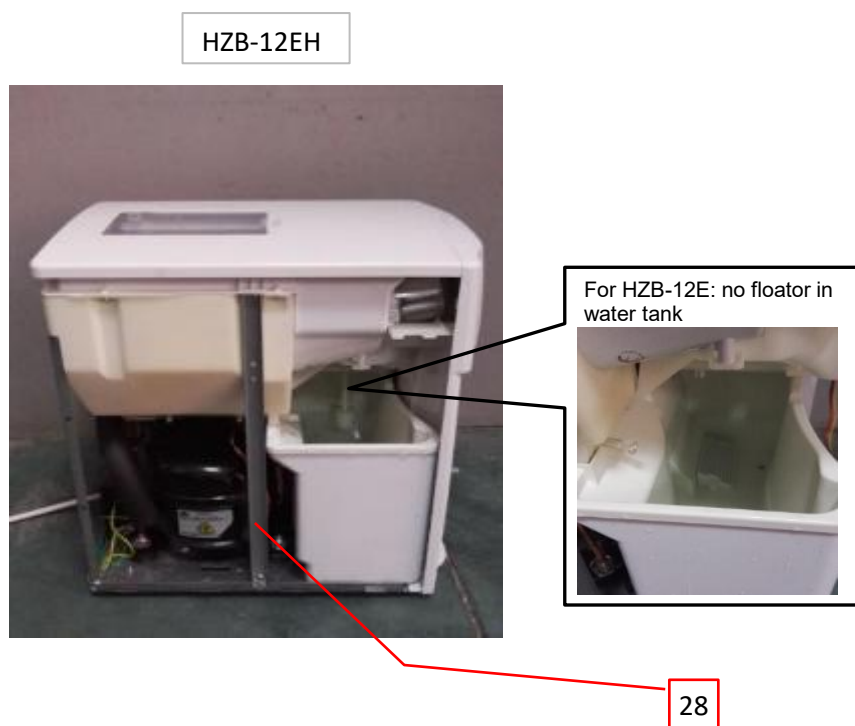
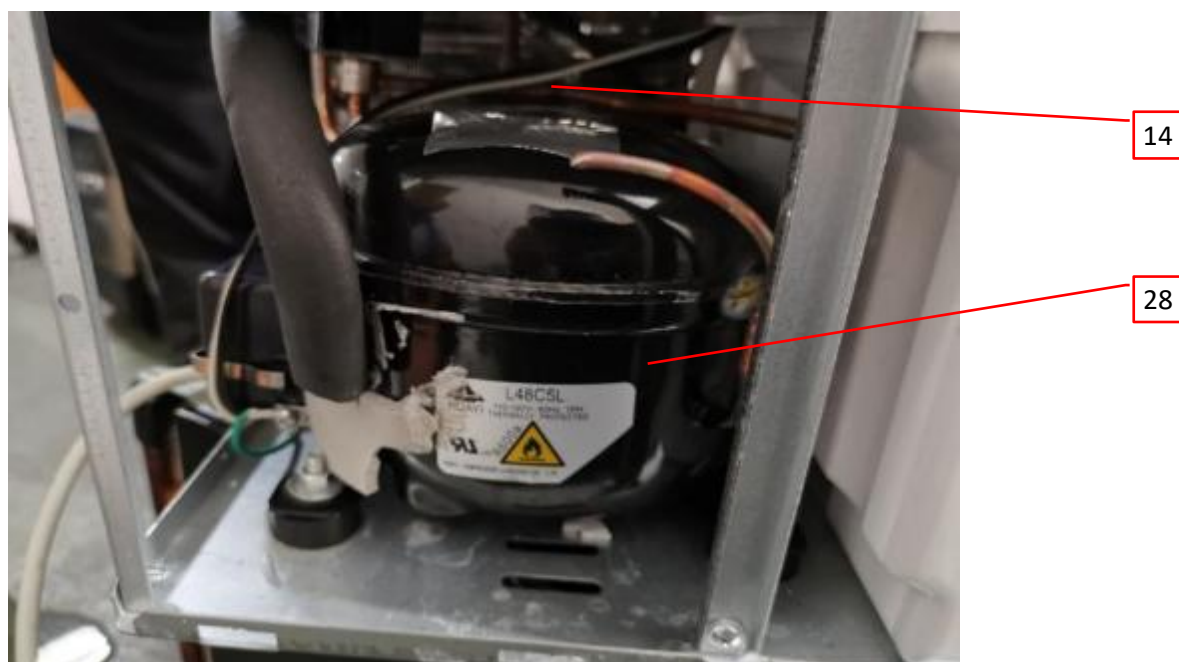


Photo 2.5a - Alternative compressor (L48C5L) for HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.5b - Alternative compressor (HV48Y11A) for HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.6 - Internal view - HZB-12E, HZB-12EH

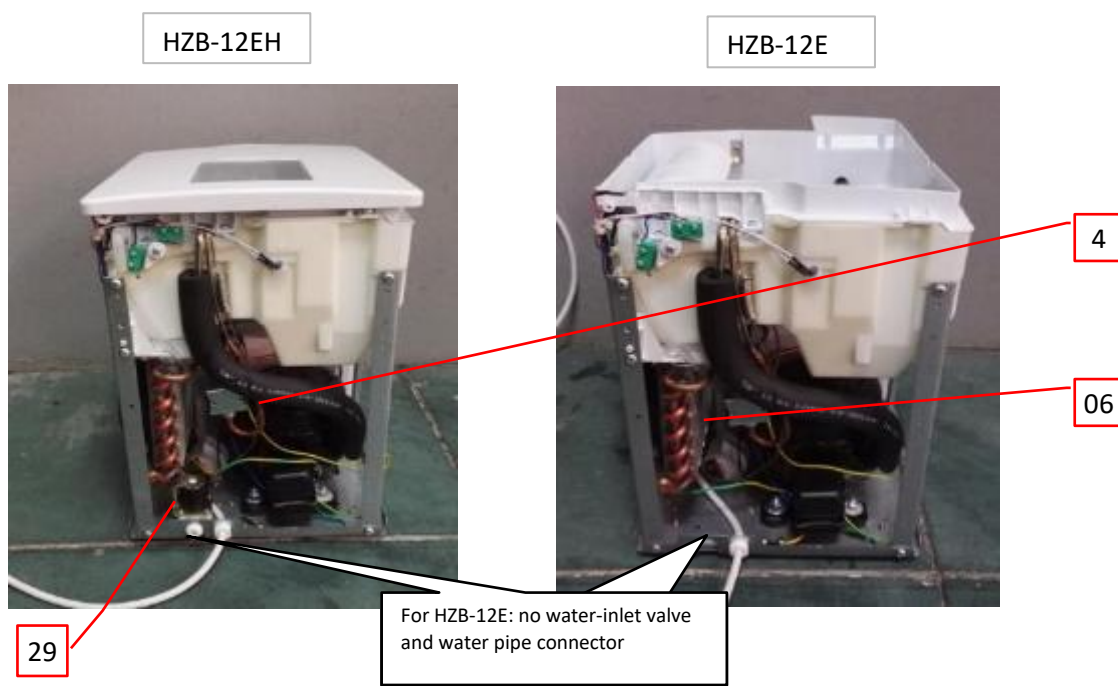
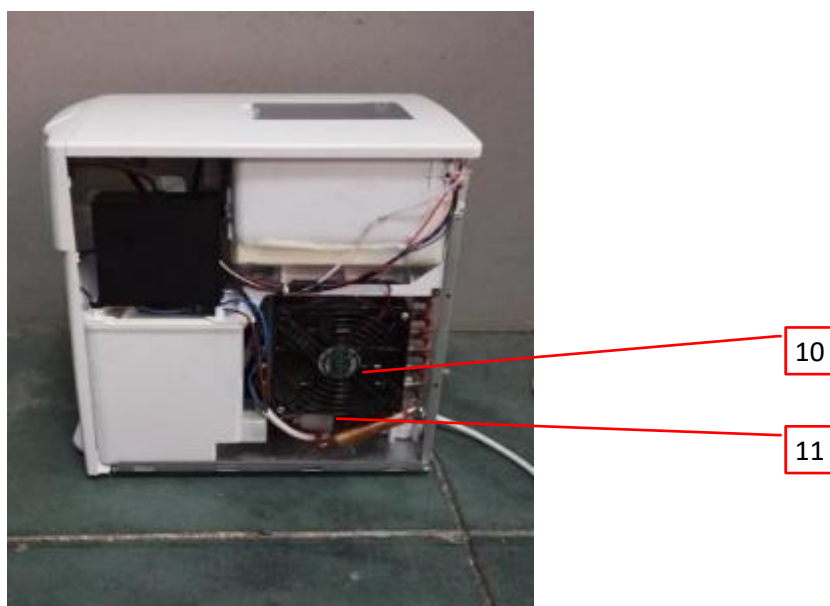


Photo 2.7 - Internal view - HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.8 - Grounding terminal view - HZB-12E, HZB-12EH



Photo 2.9 - Main PWB view - HZB-12E

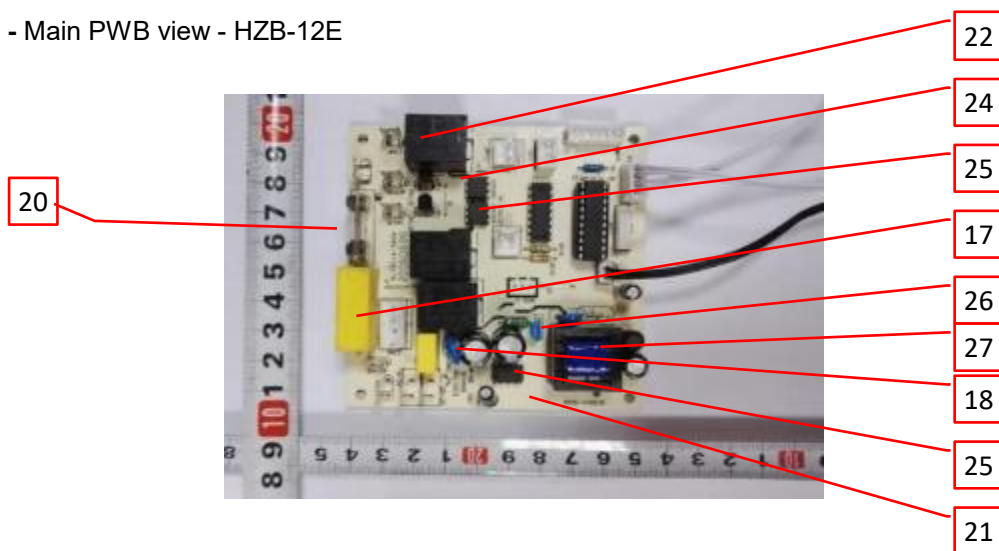


Photo 2.10 - Main PWB view - HZB-12E



3.0 Product Photographs

Photo 2.11 - Main PWB view - HZB-12EH

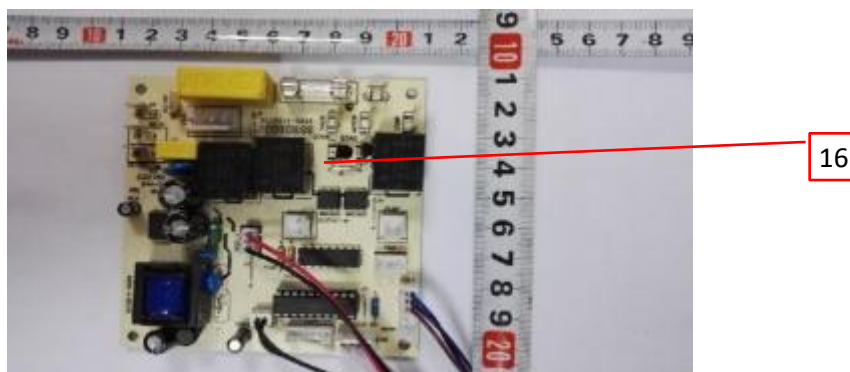


Photo 2.12 - Main PWB view - HZB-12EH



Photo 2.12a - Alternative Main PWB view - HZB-12E and HZB-12EH



3.0 Product Photographs

Photo 2.12b - Alternative Main PWB view - HZB-12E and HZB-12EH



Photo 2.13 - Control PWB view - HZB-12E, HZB-12EH



Photo 2.14 - Control PWB view - HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.15 - Alternative Main PWB view - HZB-12E, HZB-12EH

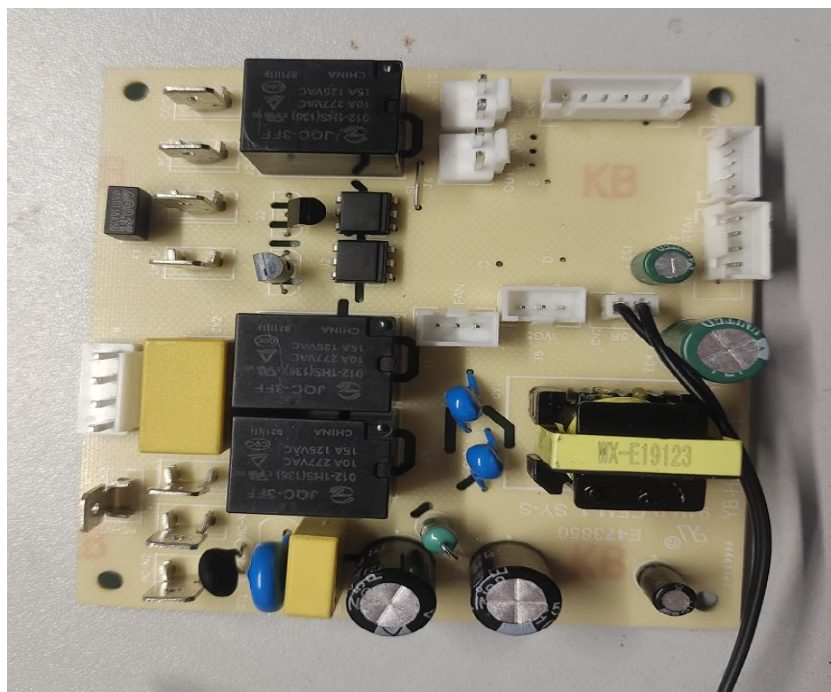
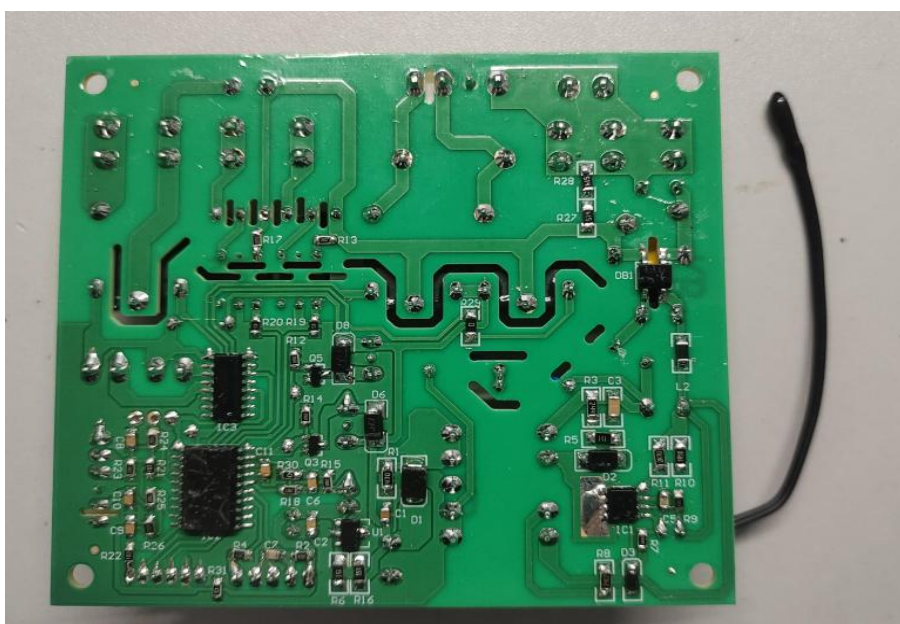


Photo 2.16 - Alternative Main PWB view - HZB-12E, HZB-12EH



3.0 Product Photographs

Photo 2.17 - General view for HZBY-12



Photo 2.18 - Rear view for HZBY-12



3.0 Product Photographs

Photo 2.19 - Top view for HZBY-12

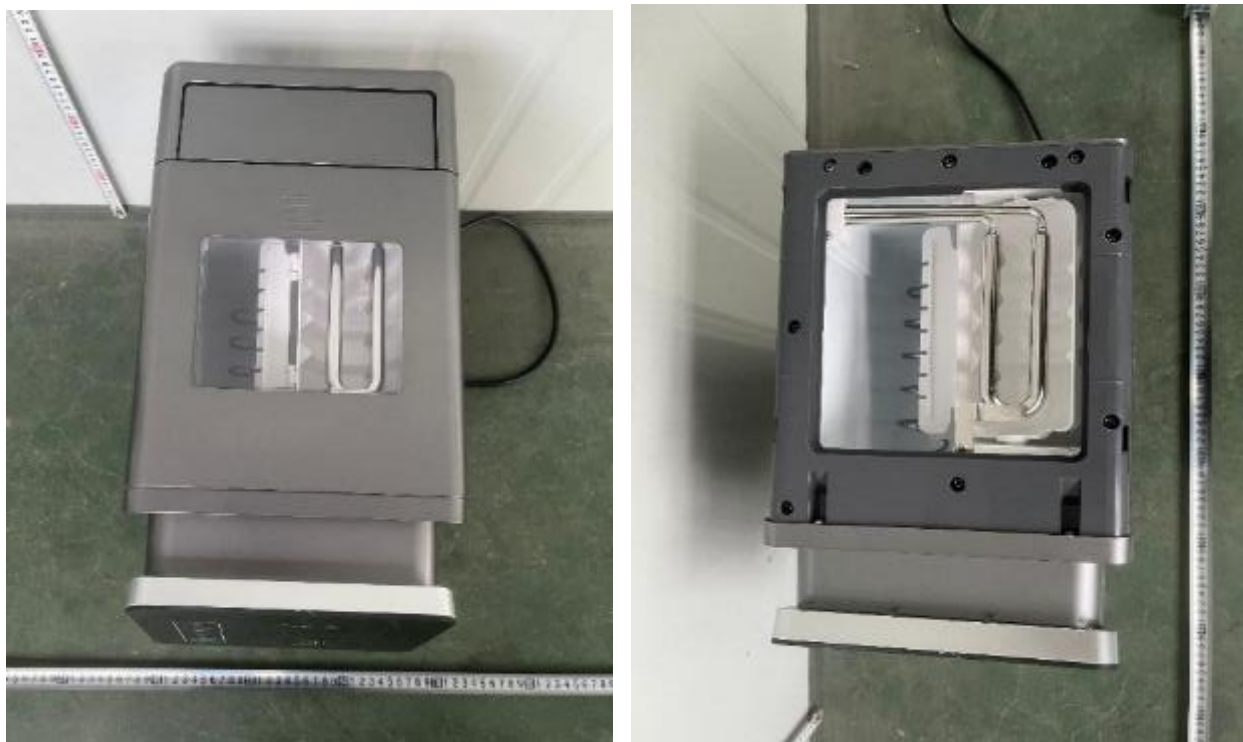
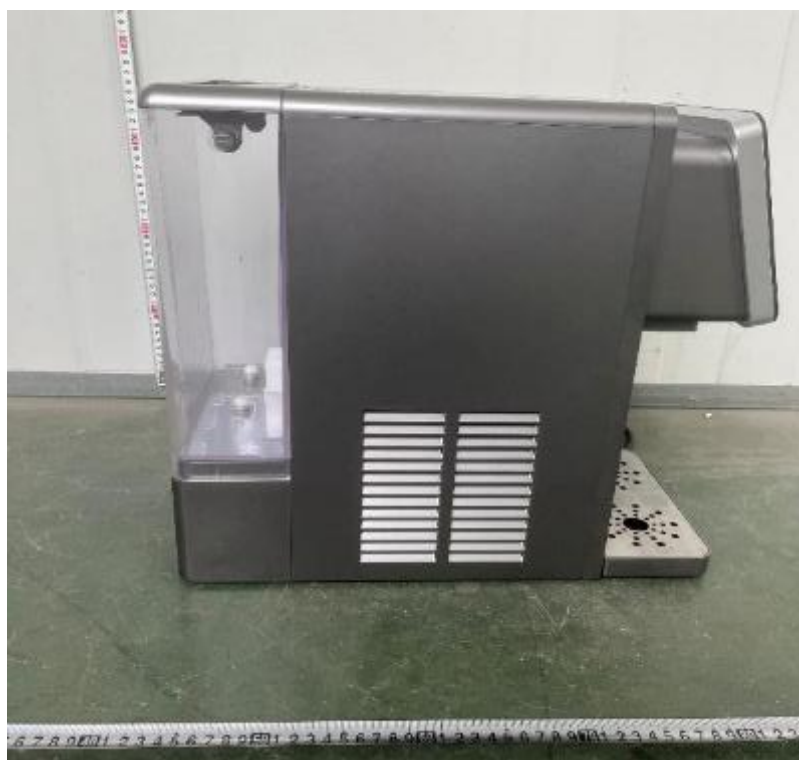


Photo 2.20 - Side view for HZBY-12

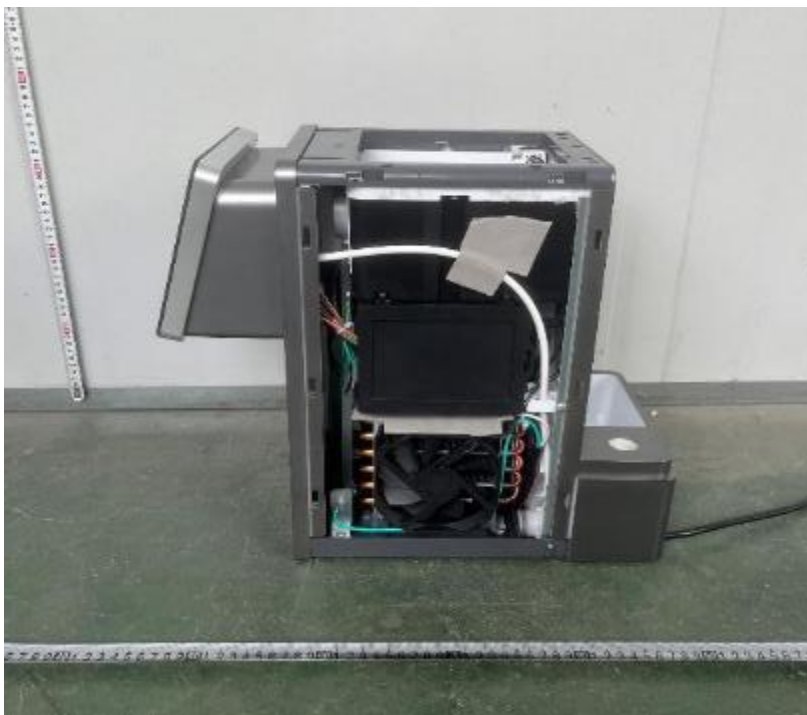


3.0 Product Photographs

Photo 2.21 - Side view for HZBY-12



Photo 2.22 - Internal view for HZBY-12



3.0 Product Photographs

Photo 2.23 - Internal view for HZBY-12



Photo 2.24 - Internal view for HZBY-12



3.0 Product Photographs

Photo 2.25 - Internal view for HZBY-12



Photo 2.26 - Compressor HD48Y11A view



3.0 Product Photographs

Photo 2.27 - Main control PCB view for HZBY-12

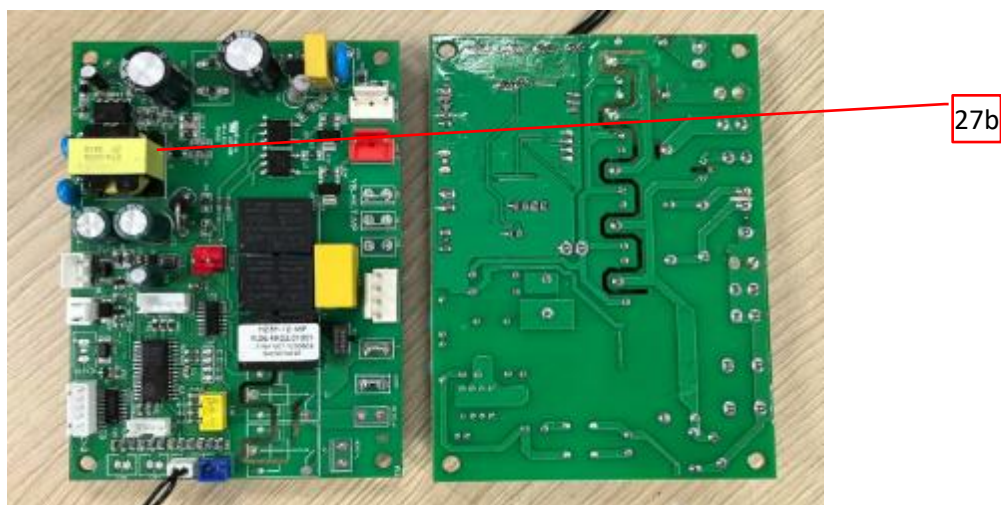
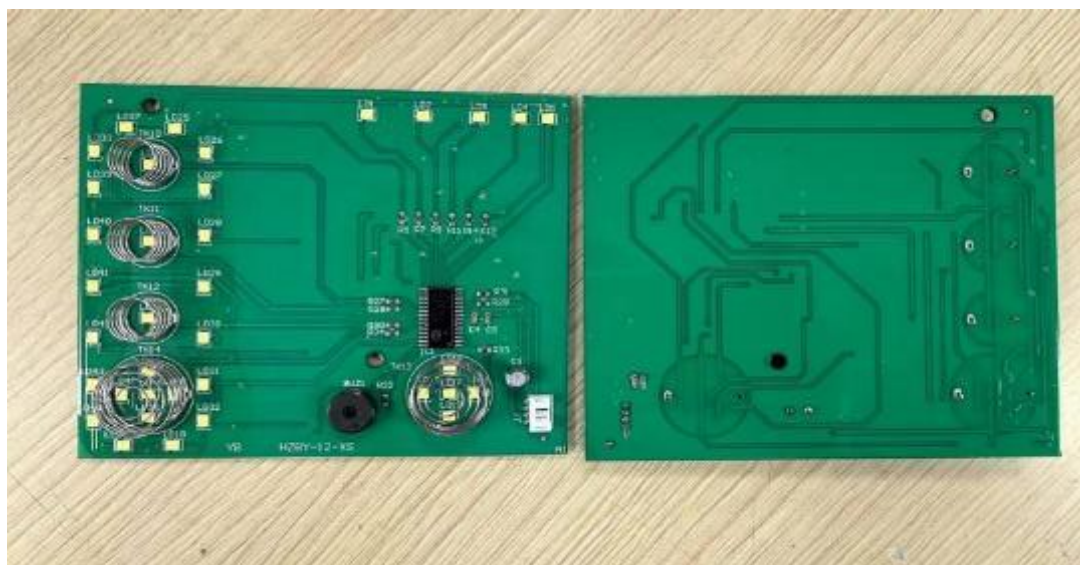


Photo 2.28 - Control panel PCB view for HZBY-12



3.0 Product Photographs

Photo 3.1 - Front view - HZB-30D



Photo 3.2 - Side view - HZB-30D



3.0 Product Photographs

Photo 3.3 - Rear view with cover removed - HZB-30D

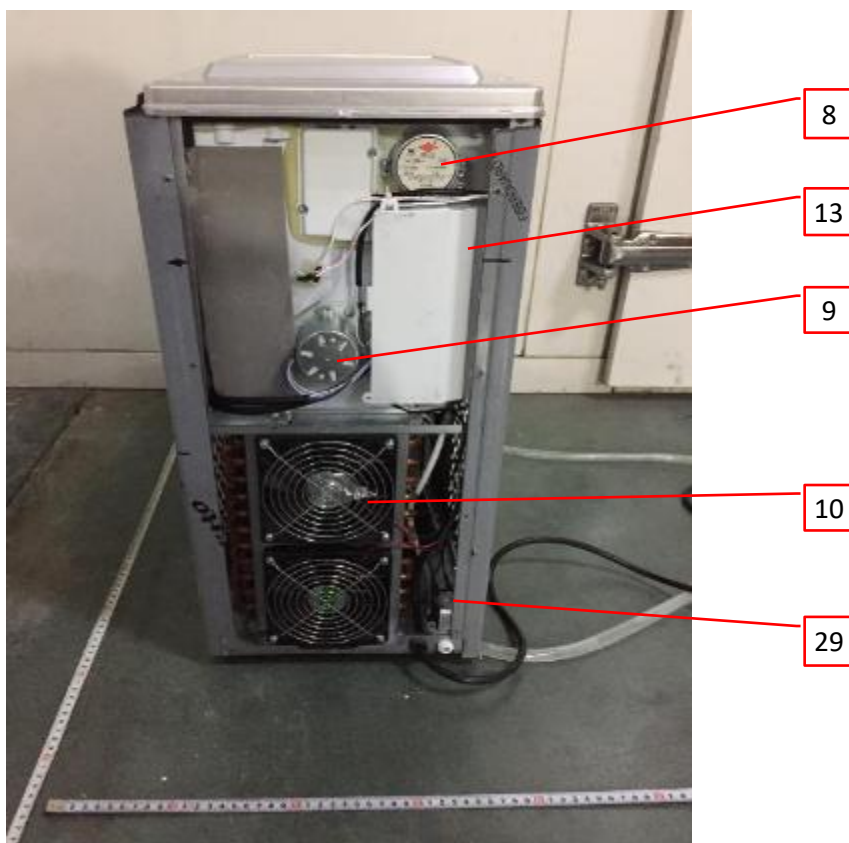
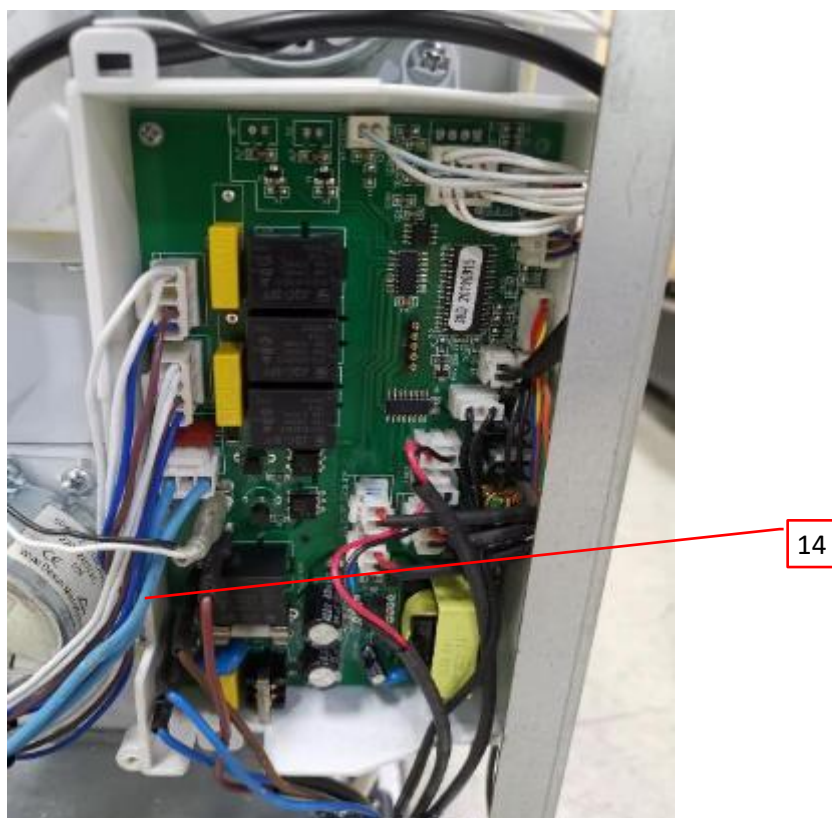
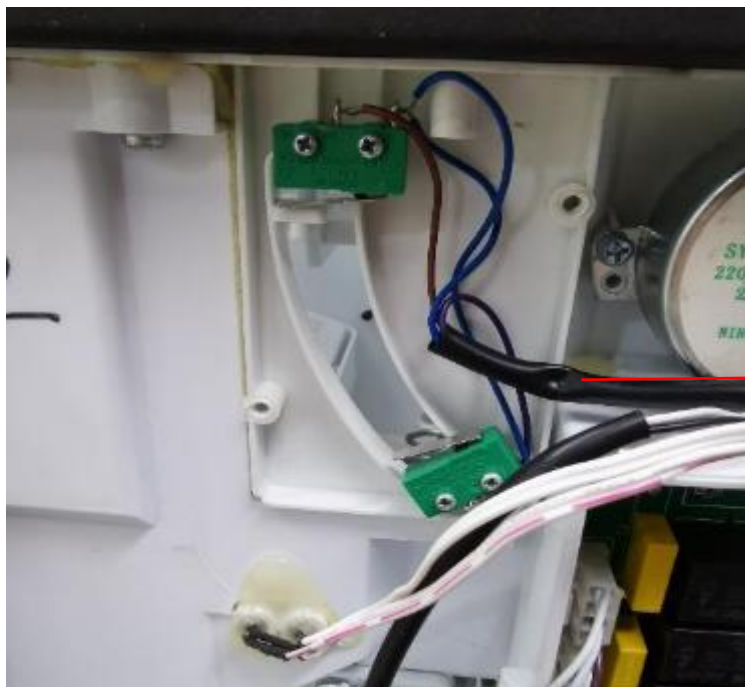


Photo 3.4 - Internal view (main PWB box) - HZB-30D



3.0 Product Photographs

Photo 3.5 - Internal view (micro switch) - HZB-30D



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Photo 3.6 - Internal view (left side) - HZB-30D



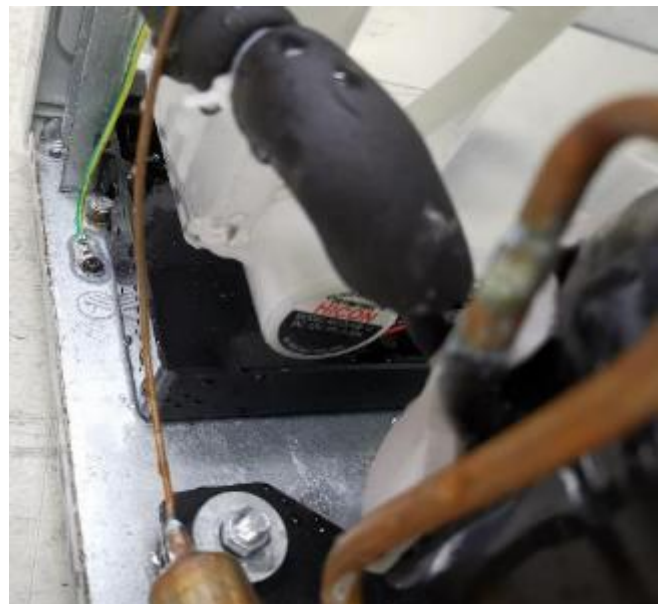
11

3.0 Product Photographs

Photo 3.7 - Internal view (right side) - HZB-30D



Photo 3.8 - Internal view (water pumps) - HZB-30D

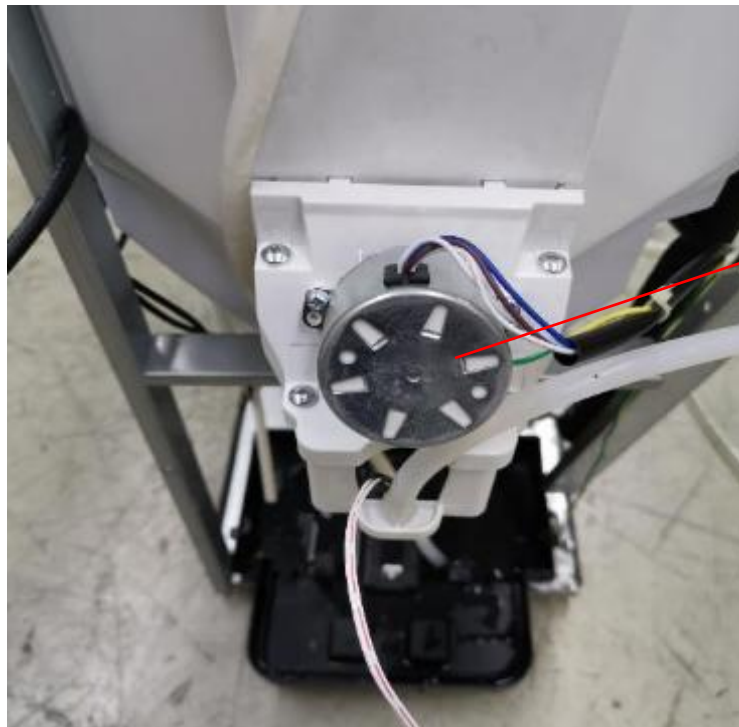


3.0 Product Photographs

Photo 3.9 - Ice-making compartment view - HZB-30D



Photo 3.10 - Internal view (Ice-dispelling Motor) - HZB-30D



3.0 Product Photographs

Photo 3.11 - Internal view (Water pump) - HZB-30D



Photo 3.12 - Earthing terminal view - HZB-30D



3.0 Product Photographs

Photo 3.13 - Control panel PWB view - HZB-30D

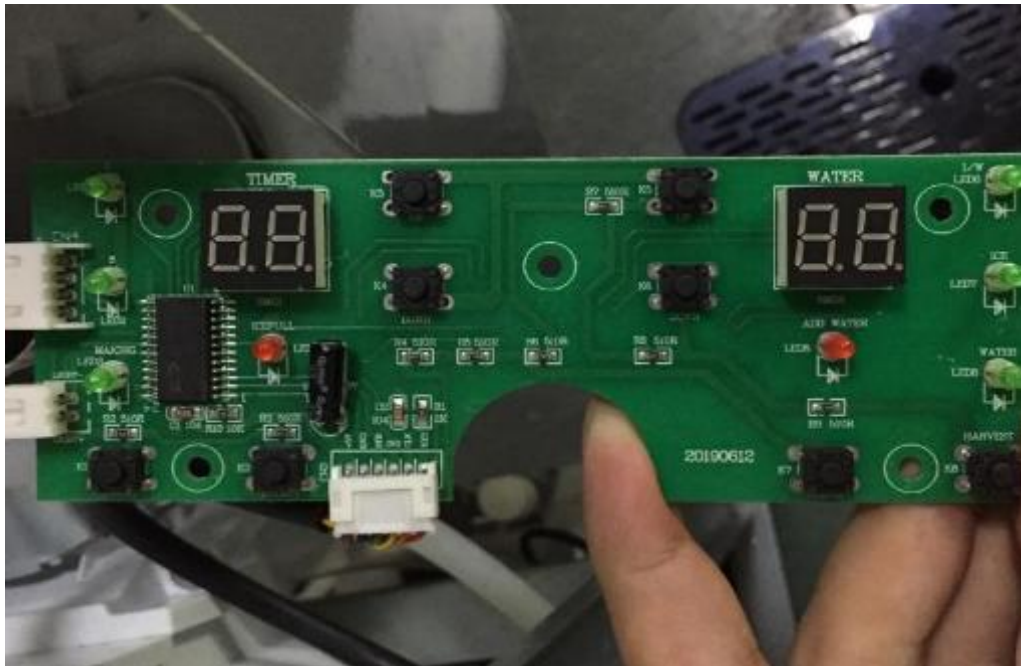
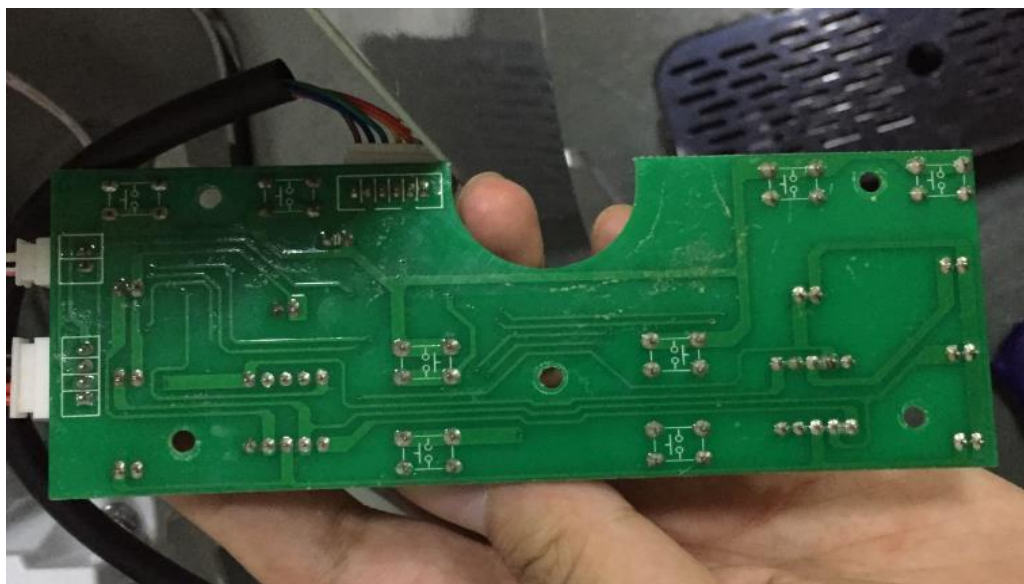


Photo 3.14 - Control panel PWB view - HZB-30D

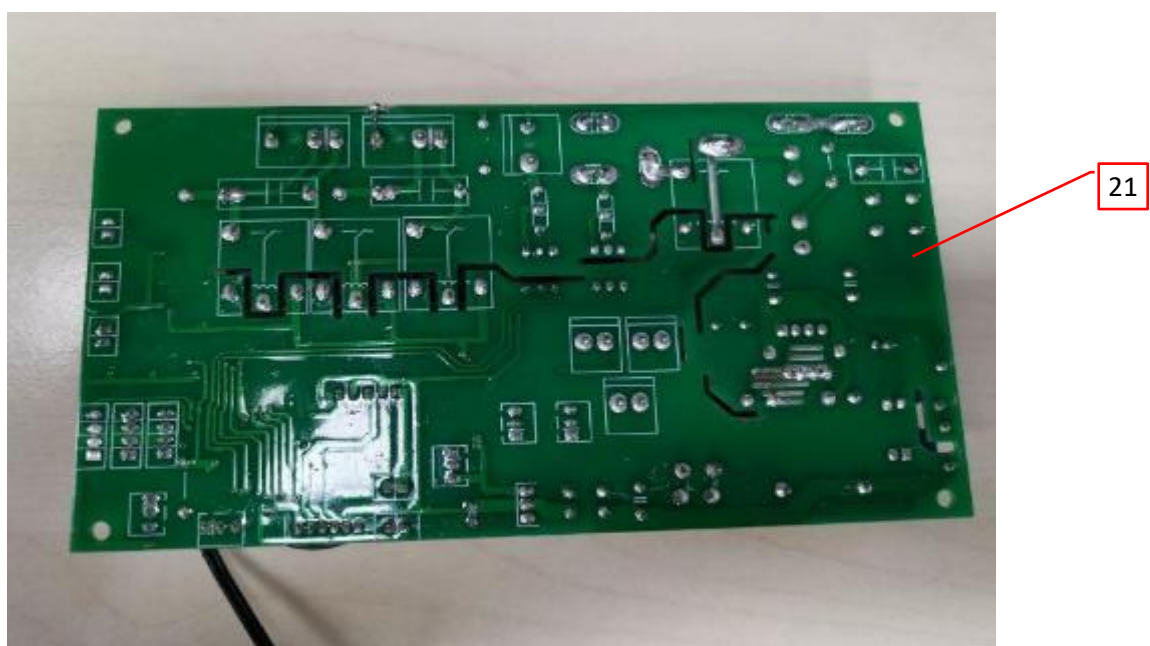


3.0 Product Photographs

Photo 3.15 - Main PWB view - HZB-30D



Photo 3.16 - Main PWB view - HZB-30D



3.0 Product Photographs

Photo 3.17 - Compressor view - HZB-30D



Photo 4.1 - Front view for HZB-20N



3.0 Product Photographs

Photo 4.1a - Top view for HZB-20N



Photo 4.1b - Alternative front view for HZB-20N



3.0 Product Photographs

Photo 4.1c - Alternative top view for HZB-20N



Photo 4.1d - Front view for HZB-20AN



3.0 Product Photographs

Photo 4.2 - Side view for HZB-20N



Photo 4.3 - Rear view for HZB-20N



3.0 Product Photographs

Photo 4.3a - General view for HZB-20BN



Photo 4.3b - Rear view for HZB-20BN



3.0 Product Photographs

Photo 4.3c - Side view for HZB-20BN



Photo 4.3d - Side view for HZB-20BN



3.0 Product Photographs

Photo 4.3e - Top view for HZB-20BN



Photo 4.3f - Front view for HZB-20CN



3.0 Product Photographs

Photo 4.3g - Side view for HZB-20CN



Photo 4.3h - Rear view for HZB-20CN



3.0 Product Photographs

Photo 4.3i - Top view for HZB-20CN



Photo 4.3j - Front view for HZB-20DN



3.0 Product Photographs

Photo 4.3k - Side view for HZB-20DN



Photo 4.3l - Side view for HZB-20DN



3.0 Product Photographs

Photo 4.3m - Rear view for HZB-20DN



Photo 4.3n - Bottom view for HZB-20DN



3.0 Product Photographs

Photo 4.3o - Rear view for HZB-20DN with optional external water supply



Photo 4.3p - Top view for HZB-20DN



3.0 Product Photographs

Photo 4.3q - Front view for HZB-15N



Photo 4.3r - Side view for HZB-15N



3.0 Product Photographs

Photo 4.3s - Side view for HZB-15N



Photo 4.3t - Rear view for HZB-15N



3.0 Product Photographs

Photo 4.3u - Top view for HZB-15N



Photo 4.3v - Front view for HZB-15N/S



3.0 Product Photographs

Photo 4.3w - Side view for HZB-15N/S



Photo 4.3x - Rear view for HZB-15N/S



3.0 Product Photographs

Photo 4.3y - Top view for HZB-15N/S



Photo 4.3z - Front view for HZB-15NA



3.0 Product Photographs

Photo 4.3aa - Side view for HZB-15NA



Photo 4.3ab - Rear view for HZB-15NA



3.0 Product Photographs

Photo 4.3ac - Top view for HZB-15NA



Photo 4.3ad - Alternative general view for HZB-15N



3.0 Product Photographs

Photo 4.3ae - Alternative general view for HZB-15N/S



Photo 4.3af - Front view for HZB-15NB/S



3.0 Product Photographs

Photo 4.3ag - Side view for HZB-15NB/S



Photo 4.3ah - Rear view for HZB-15NB/S



3.0 Product Photographs

Photo 4.3ah1 - Front view for HZB-15NB/S (alternative)



Photo 4.3ah2 - Front view for HZB-15NB/S (alternative)



3.0 Product Photographs

Photo 4.3ah3 - Front view for HZB-15NB



Photo 4.3ah4 - Side view for HZB-15NB



3.0 Product Photographs

Photo 4.3ah5 - Rear view for HZB-15NB



Photo 4.3ah6 - General view for HZB-15NB (alternative)



3.0 Product Photographs

Photo 4.3ai - Front view for HZB-15EN and HZB-20EN



Photo 4.3aj - Alternative front view for HZB-15EN and HZB-20EN



3.0 Product Photographs

Photo 4.3aj1 - Alternative front view for HZB-15EN and HZB-20EN



Photo 4.3aj2 - Alternative front view for HZB-15EN and HZB-20EN



3.0 Product Photographs

Photo 4.3ak - Side view for HZB-15EN and HZB-20EN

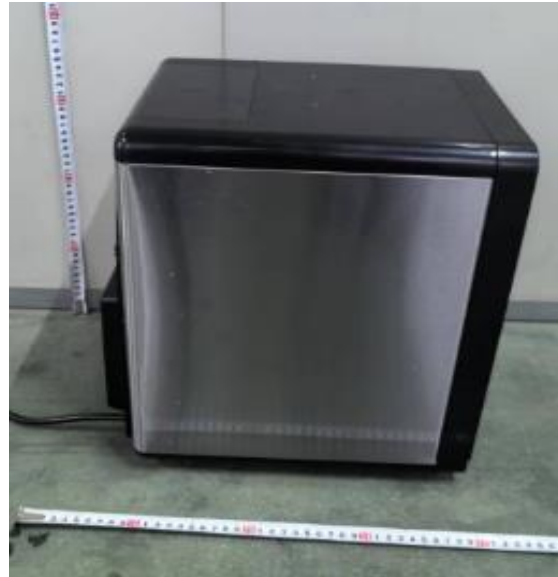
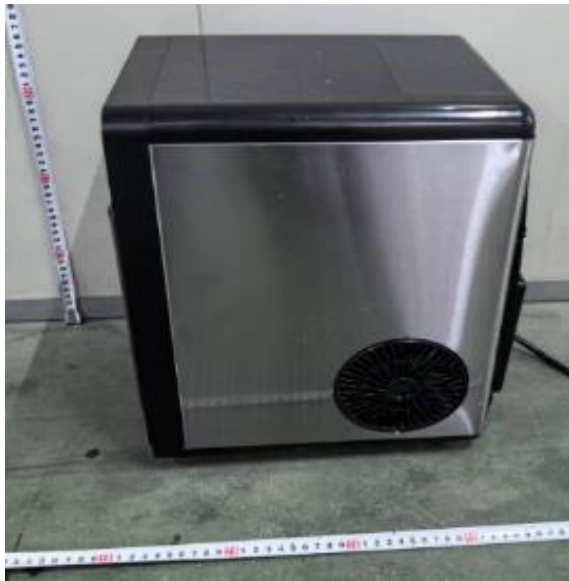


Photo 4.3al - Alternative side view for HZB-15EN and HZB-20EN



3.0 Product Photographs

Photo 4.3am - Rear view for HZB-15EN and HZB-20EN



Photo 4.3an - Bottom view for HZB-15EN and HZB-20EN



3.0 Product Photographs

Photo 4.3ao -View of door open and remove the water tank for HZB-15EN and HZB-20EN



Photo 4.3ap - Alternative front view for HZB-20EN



3.0 Product Photographs

Photo 4.3ap1 - Front view for HZB-20FN



Photo 4.3ap2 - View of door open and remove the water tank for HZB-20FN



3.0 Product Photographs

Photo 4.3ap3 - Side view for HZB-20FN



Photo 4.3ap4 - Side view for HZB-20FN



3.0 Product Photographs

Photo 4.3ap5 - Rear view for HZB-20FN



Photo 4.3ap6 - Bottom view for HZB-20FN



3.0 Product Photographs

Photo 4.3aq - General view for HZB-15NF



Photo 4.3ar - Side view for HZB-15NF



3.0 Product Photographs

Photo 4.3as - Bottom view for HZB-15NF



Photo 4.3aa1 - Front view for HZB-15DN and its control panel



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3.0 Product Photographs

Photo 4.3aa2 - Side view for HZB-15DN



Photo 4.3aa3 - Side view for HZB-15DN



3.0 Product Photographs

Photo 4.3aa3a - Front view for HZB-15DN and its control panel (alternative)



Photo 4.3aa3b - Side view for HZB-15DN (alternative)



3.0 Product Photographs

Photo 4.3aa4 - Rear view for HZB-15DN



Photo 4.3aa5 - Top view for HZB-15DN with cover removed



3.0 Product Photographs

Photo 4.3aa6 - Front view for HZB-15NG



Photo 4.3aa7 - Top view for HZB-15NG with ice basket removed



3.0 Product Photographs

Photo 4.3aa8 - Side view for HZB-15NG



Photo 4.3aa9 - Rear view for HZB-15NG



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3.0 Product Photographs

Photo 4.3aa10 - Front view for HZB-15NH/S



Photo 4.3aa11 - Top view for HZB-15NH/S with ice basket removed



3.0 Product Photographs

Photo 4.3aa12 - Side view for HZB-15NH/S



Photo 4.3aa13 - Rear view for HZB-15NH/S



3.0 Product Photographs

Photo 4.3aa14 - Front view for HZB-15NH



Photo 4.3aa15 - Side view for HZB-15NH



3.0 Product Photographs

Photo 4.3aa16 - Side view for HZB-15NH



Photo 4.3aa17 - Rear view for HZB-15NH



3.0 Product Photographs

Photo 4.3aa18 - Front view for HZB-15NH (alternative)



Photo 4.3aa19 - Side view for HZB-15NH (alternative)



3.0 Product Photographs

Photo 4.3aa20 - Front view for HZB-15NH (alternative)



Photo 4.3aa21 - Front view for HZB-15NH (alternative)



3.0 Product Photographs

Photo 4.4 - Top view for HZB-20N (water tank removed)



Photo 4.5 - Main water supply tank for HZB-20N, etc (bottom view)



3.0 Product Photographs

Photo 4.6 - Internal view for HZB-20N



Photo 4.6a - Internal view for HZB-20CN

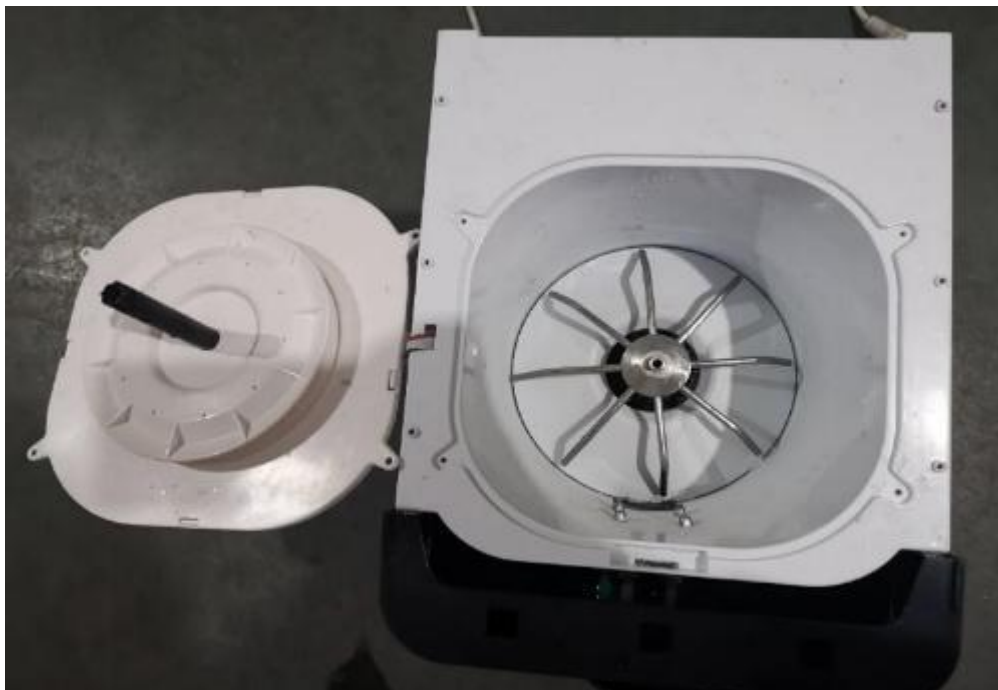


3.0 Product Photographs

Photo 4.6b - Internal view for HZB-20CN



Photo 4.6c - Internal view for HZB-20DN



3.0 Product Photographs

Photo 4.6d - Internal view for HZB-15N

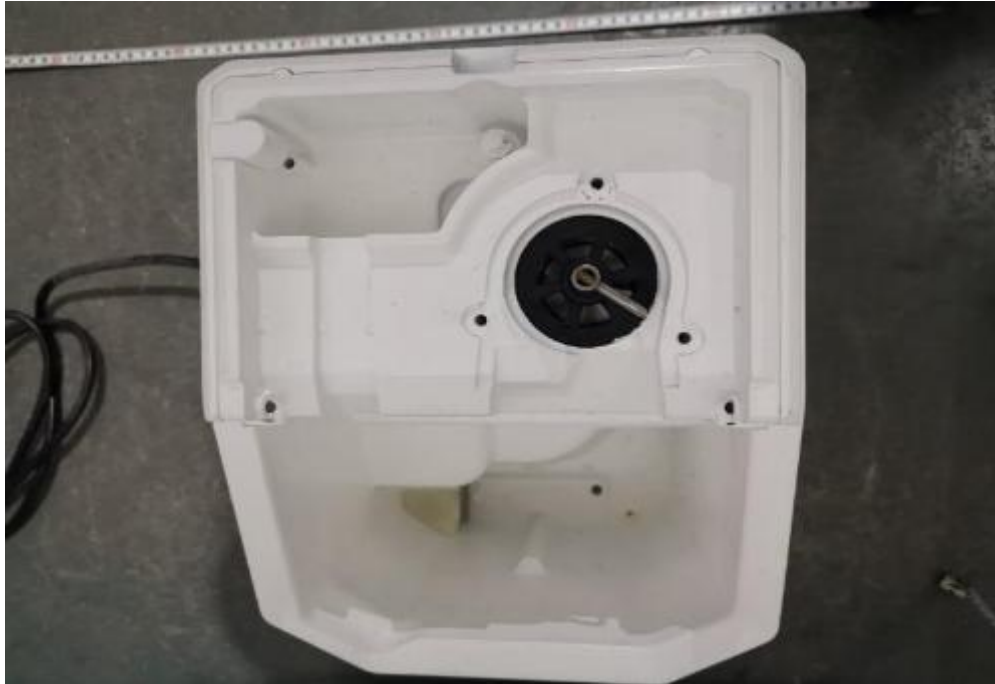


Photo 4.8 - Internal view for HZB-20N



4.5

3.0 Product Photographs

Photo 4.9 - Internal view for HZB-20N

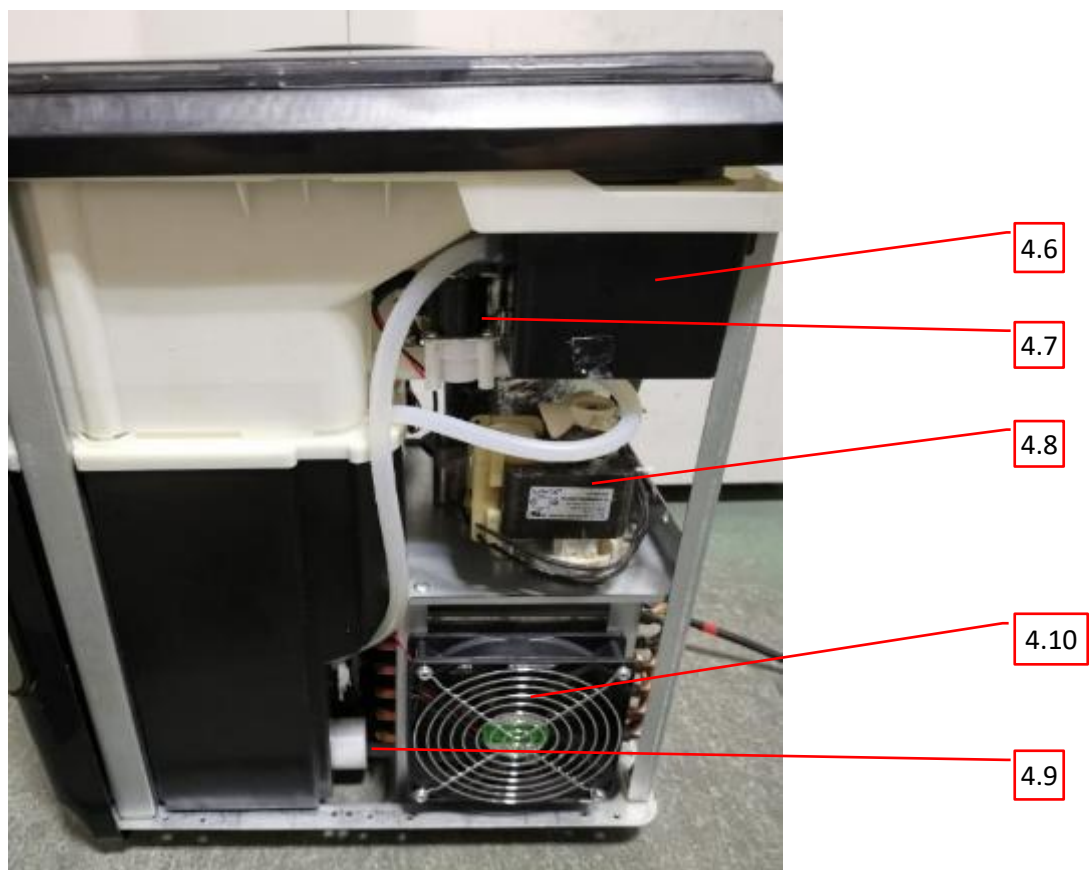
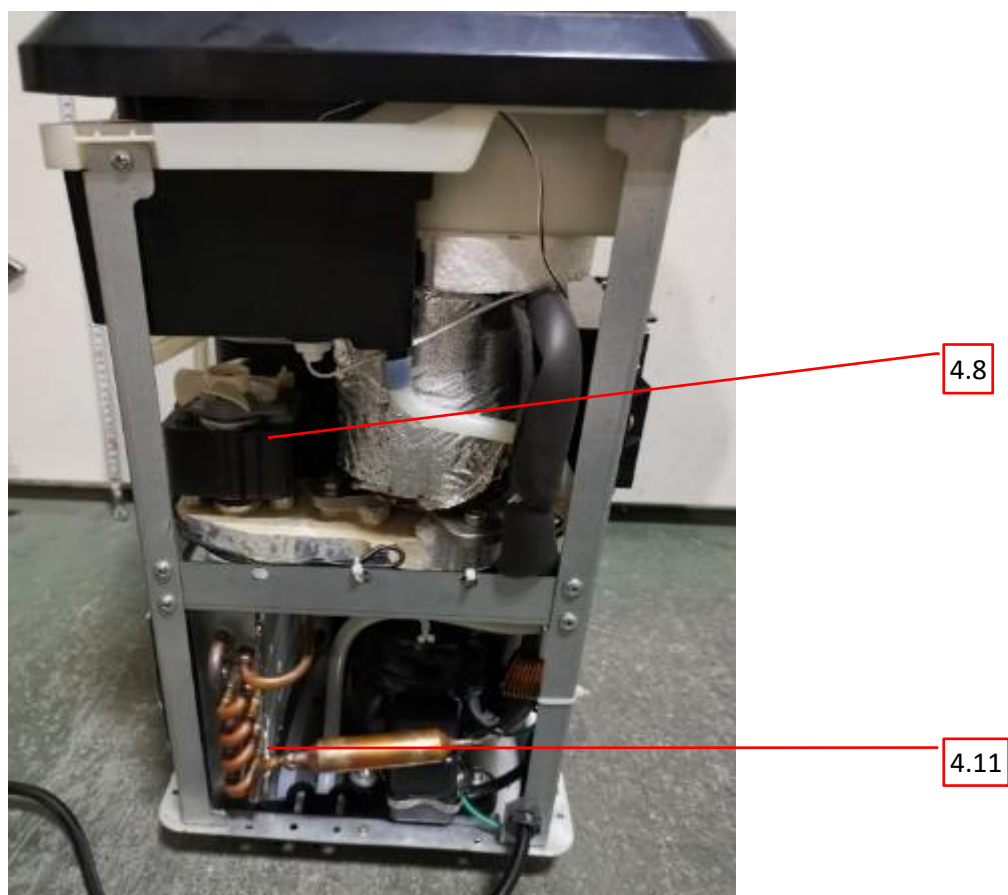


Photo 4.10 - Internal view for HZB-20N



3.0 Product Photographs

Photo 4.10a - Internal view for HZB-20BN (optional self-priming on the left side and optional external water supply on the right side)



Photo 4.10b - Internal view for HZB-20BN



3.0 Product Photographs

Photo 4.10c - Internal view for HZB-20BN



Photo 4.10d - Internal detail view for HZB-20BN



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3.0 Product Photographs

Photo 4.10e - Internal detail view for HZB-20BN with optional self-priming pump



Photo 4.10f - Internal view for HZB-20CN



3.0 Product Photographs

Photo 4.10g - Internal view for HZB-20CN



Photo 4.10h - Internal view for HZB-20CN

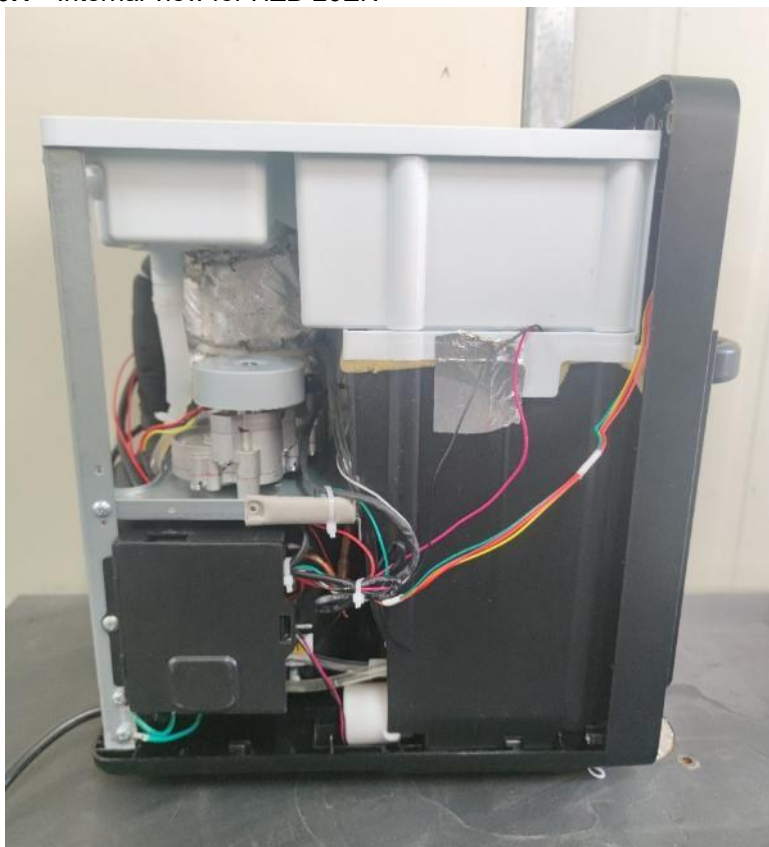


3.0 Product Photographs

Photo 4.10i - Internal view for HZB-20CN



Photo 4.10i1 - Internal view for HZB-20EN



3.0 Product Photographs

Photo 4.10i2 - Internal view for HZB-20EN



Photo 4.10i3 - Internal view for HZB-20EN



3.0 Product Photographs

Photo 4.10i4 - Internal view for HZB-20FN



Photo 4.10i5 - Internal view for HZB-20FN

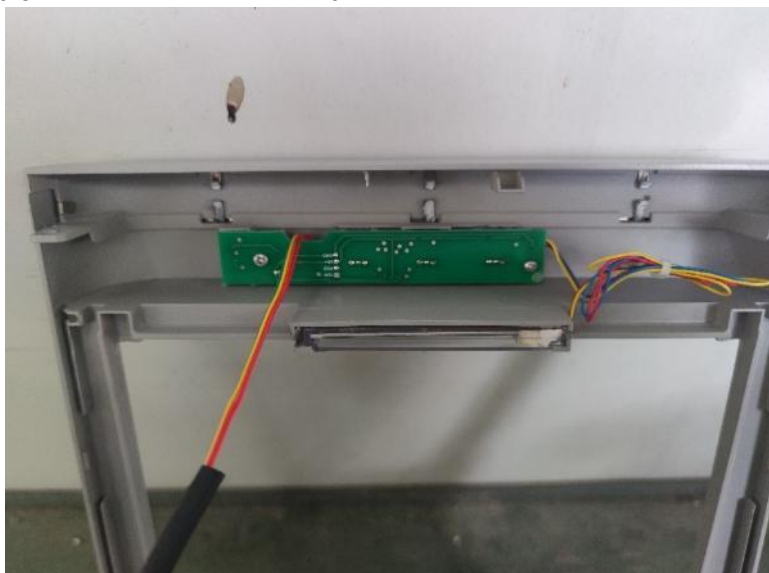


Photo 4.10i6 - Internal view for HZB-20FN



3.0 Product Photographs

Photo 4.10i7 - Internal view for HZB-20FN



Photo 4.10i8 - Internal view for HZB-20FN



3.0 Product Photographs

Photo 4.10i9 - Internal view for HZB-20FN

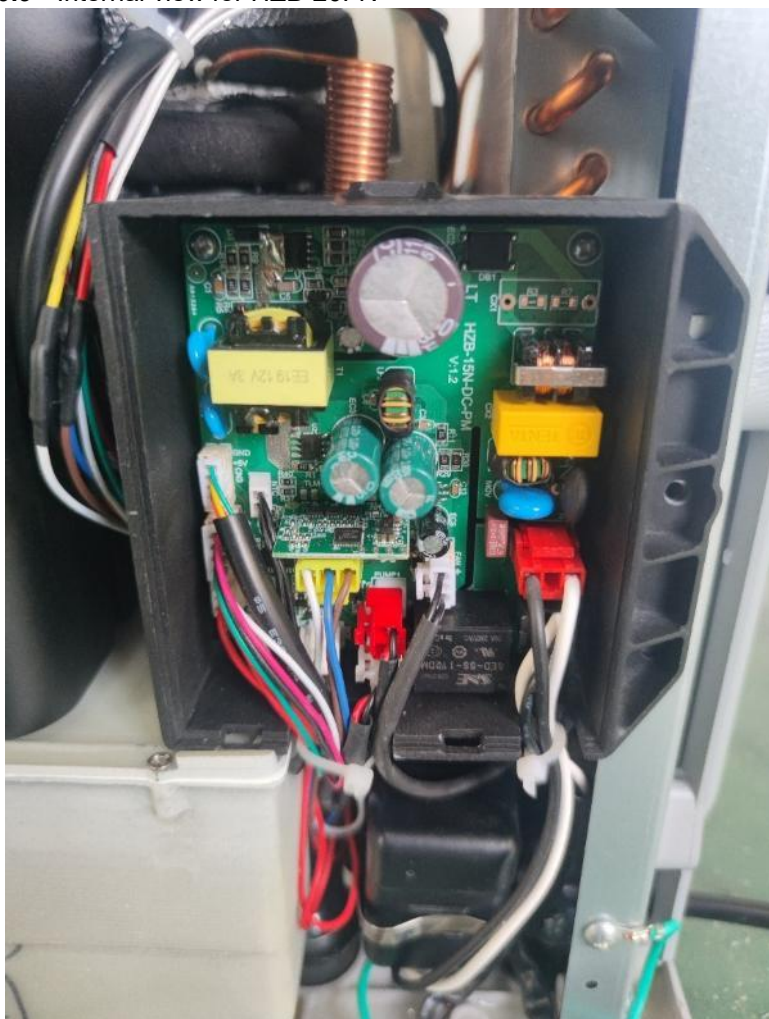


Photo 4.10j - Internal view for HZB-20DN



3.0 Product Photographs

Photo 4.10k - Internal view for HZB-20DN

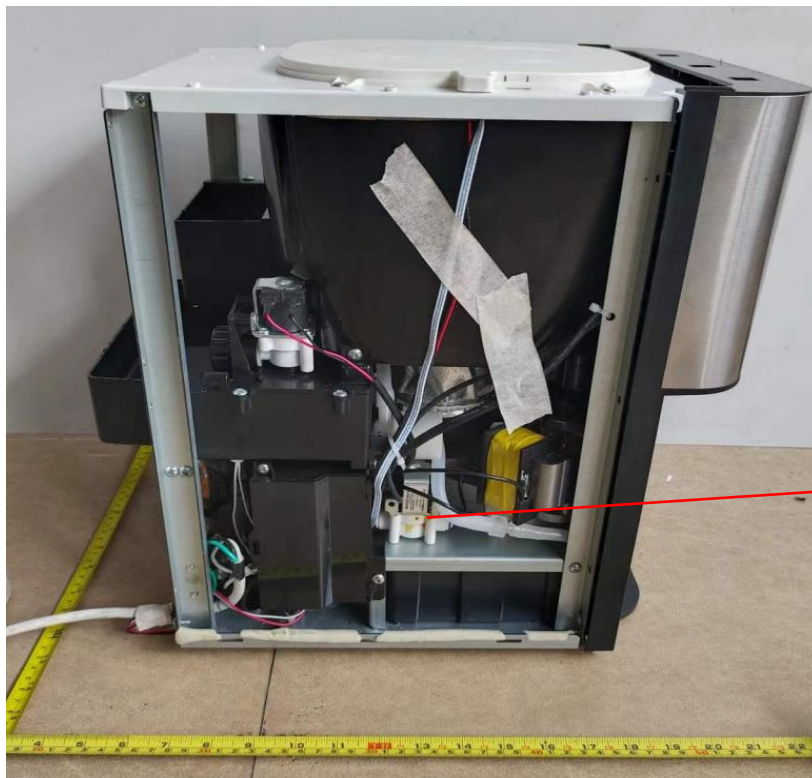


Photo 4.10l - Internal view for HZB-20DN



3.0 Product Photographs

Photo 4.10la - Internal view for HZB-20DN with optional external water supply



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Photo 4.10m - Internal view for HZB-20DN



3.0 Product Photographs

Photo 4.10n - Internal view for HZB-15NA



Photo 4.10o - Internal view for HZB-15NA



3.0 Product Photographs

Photo 4.10p - Internal view for HZB-15NA



Photo 4.10q - Internal view for HZB-15NF



3.0 Product Photographs

Photo 4.10r1 - Internal view for HZB-15DN

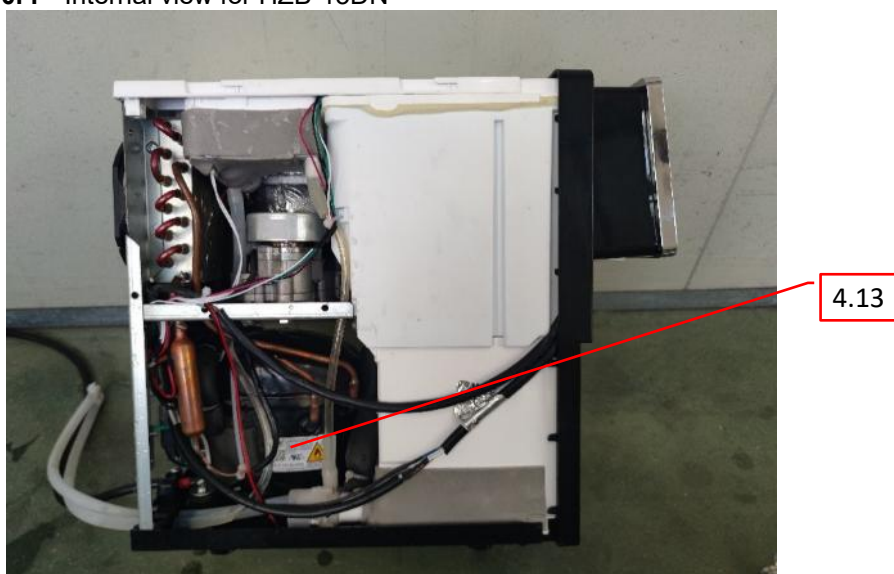


Photo 4.10r2 - Internal view for HZB-15DN (with PCB box cover removed on the right)

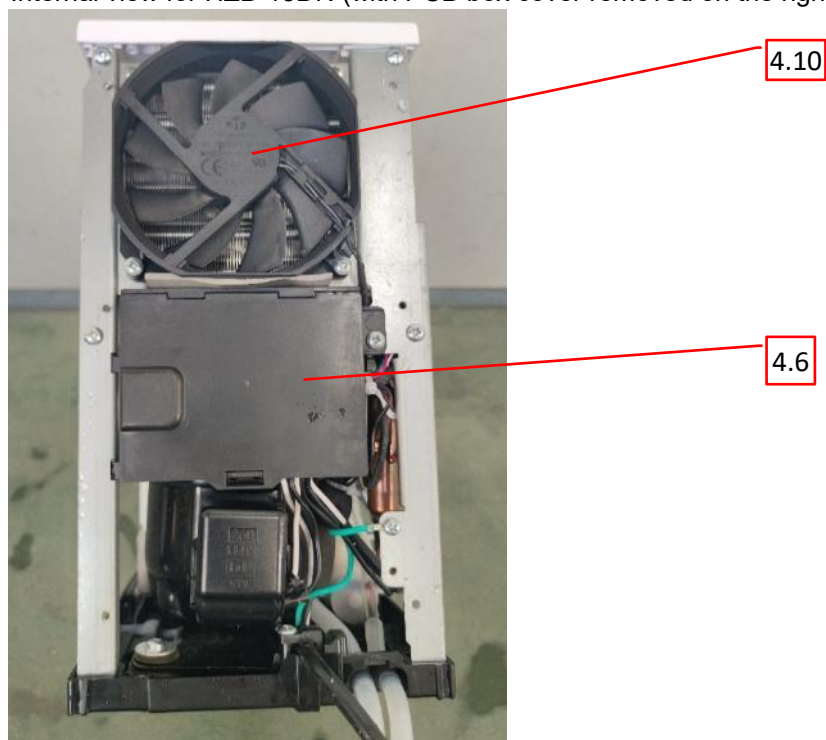


Photo 4.10r3 - Internal view for HZB-15DN (PCB box)



3.0 Product Photographs

Photo 4.10r4 - Internal view for HZB-15DN

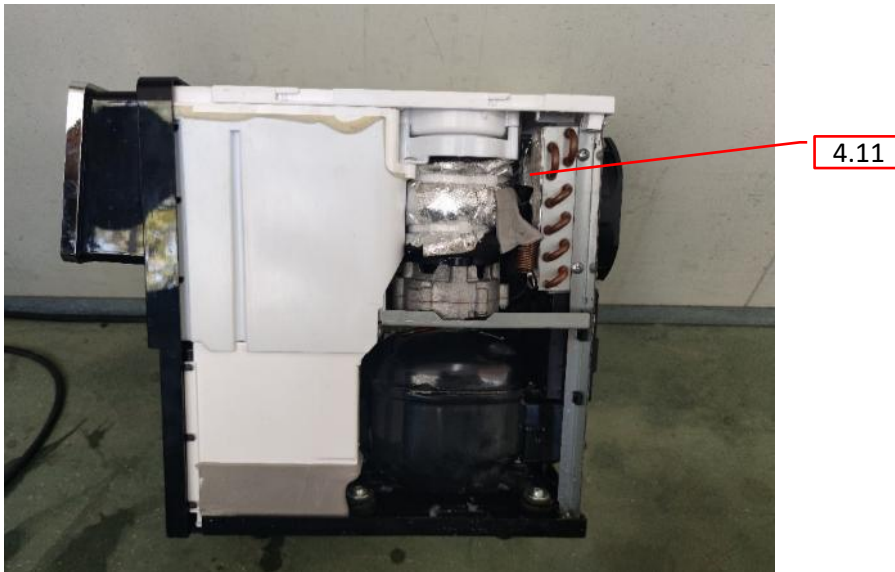


Photo 4.10r5 - Internal view for HZB-15DN



3.0 Product Photographs

Photo 4.10r6 - Internal view for HZB-15DN



Photo 4.10r7 - Internal view for HZB-15DN



3.0 Product Photographs

Photo 4.10r8 - Internal view for HZB-15NG and HZB-15NH



Photo 4.10r9 - Internal view for HZB-15NG and HZB-15NH



3.0 Product Photographs

Photo 4.10r10 - Internal view for HZB-15NG and HZB-15NH

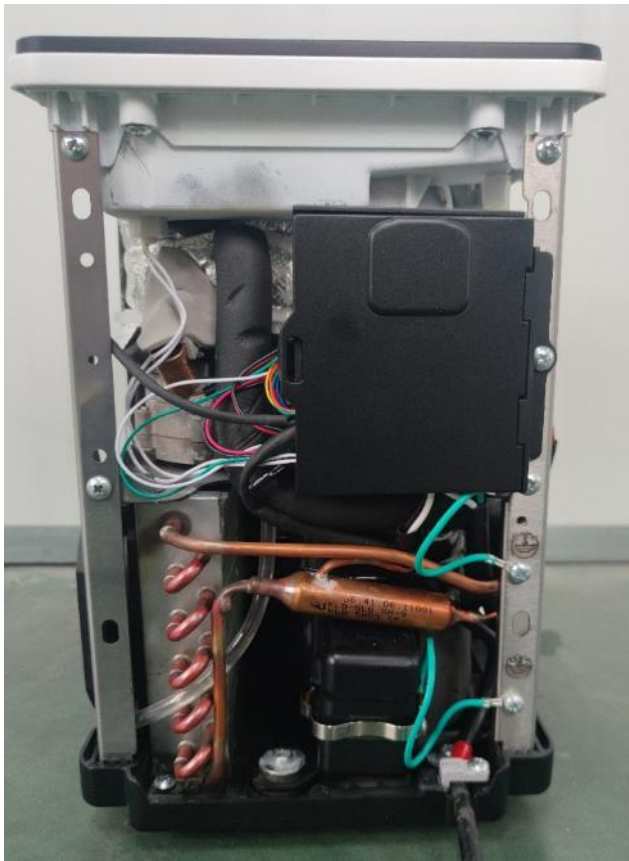
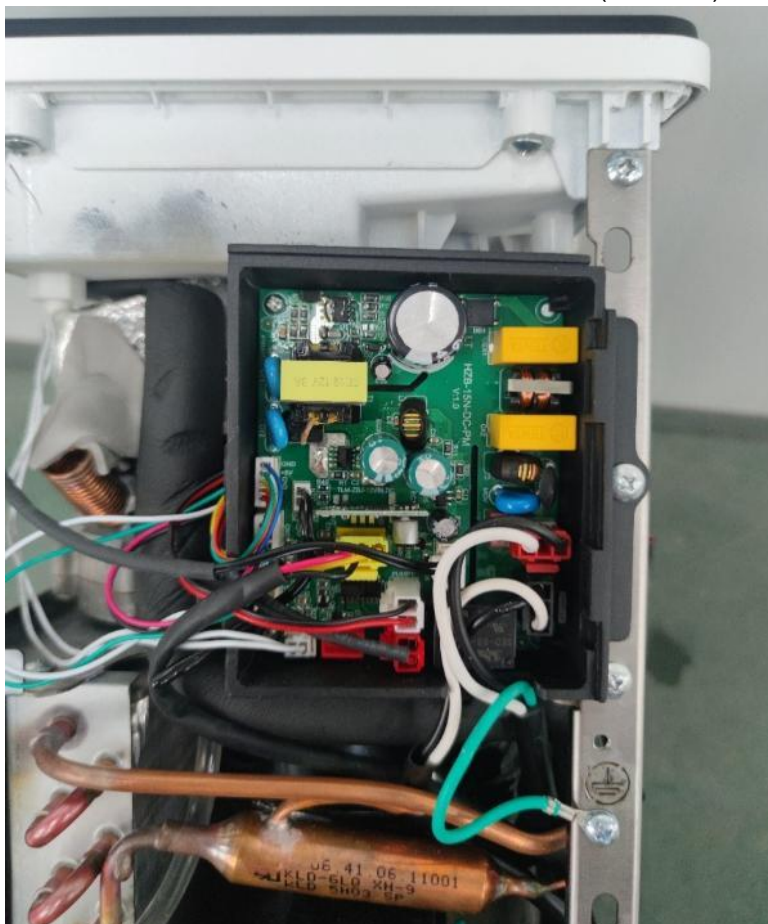


Photo 4.10r11 - Internal view for HZB-15NG and HZB-15NH (PCB box)



3.0 Product Photographs

Photo 4.11 - Internal view of evaporator (top) for HZB-**N, **AN, **BN, **CN series model unit

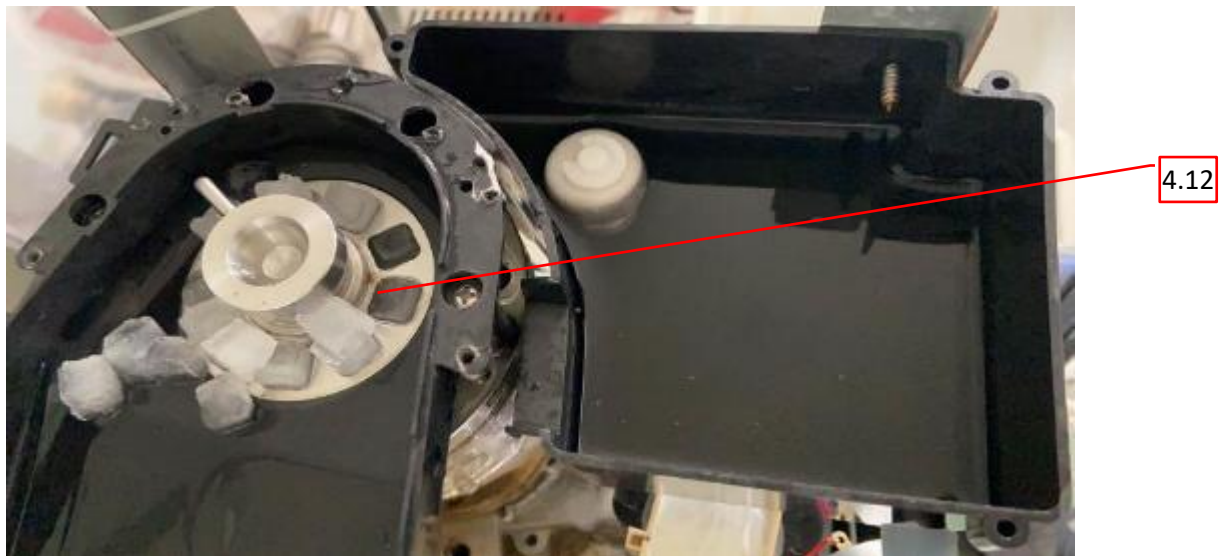


Photo 4.11a - Alternative internal view of evaporator (top) for HZB-**N, **AN, **BN, **CN series model unit



3.0 Product Photographs

Photo 4.11b - Alternative internal view of evaporator (top) for HZB-**N, **AN, **BN, **CN series model unit



Photo 4.12 - Internal view of evaporator (side) for HZB-**N, **AN, **BN, **CN series model unit



3.0 Product Photographs

Photo 4.12a - Alternative internal view for HZB-**N, **NA, **NB Series model



Photo 4.13 - Compressor view for HZB-**N, **NA, **NB, **AN, **BN, **CN, **DN series models



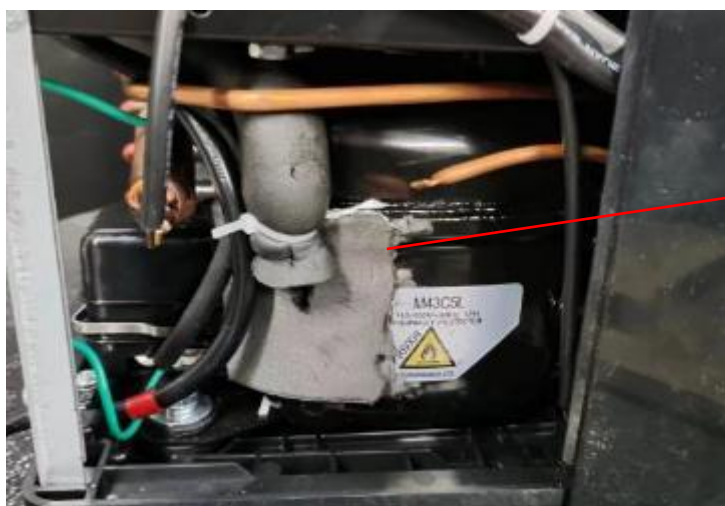
4.13

3.0 Product Photographs

Photo 4.13a - Alternative compressor view for HZB-**N, **NA, **NB, **AN, **BN, **CN, **DN series model



Photo 4.13b - Alternative compressor view for HZB-**N, **NA, **NB, **AN, **BN, **CN, **DN series model



3.0 Product Photographs

Photo 4.14 - Earthing terminal view for HZB-**N, **NA, **NB, **AN, **BN, **CN, **DN series model



Photo 4.15 - Electric box view for HZB-20N



3.0 Product Photographs

Photo 4.16a - Main control PCB view (front) for HZB-*N, -*AN, -*BN, -*CN, -*DN series except for HZB-15DN

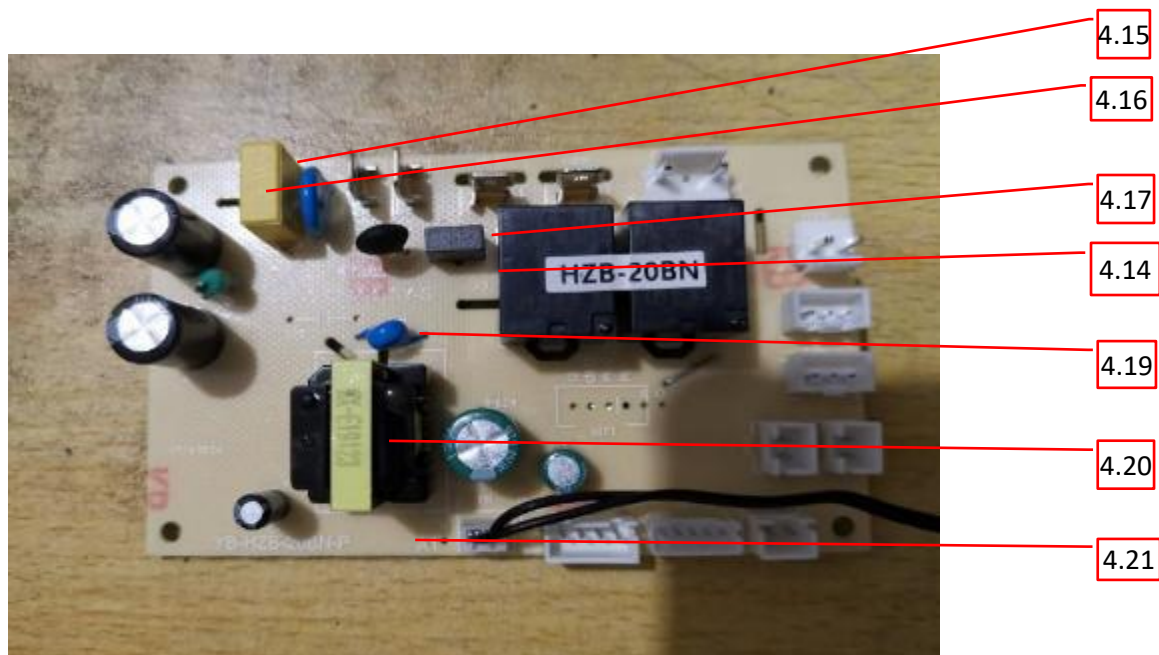


Photo 4.16b -Alternative Main control PCB view (front) for all models except for HZB-15DN

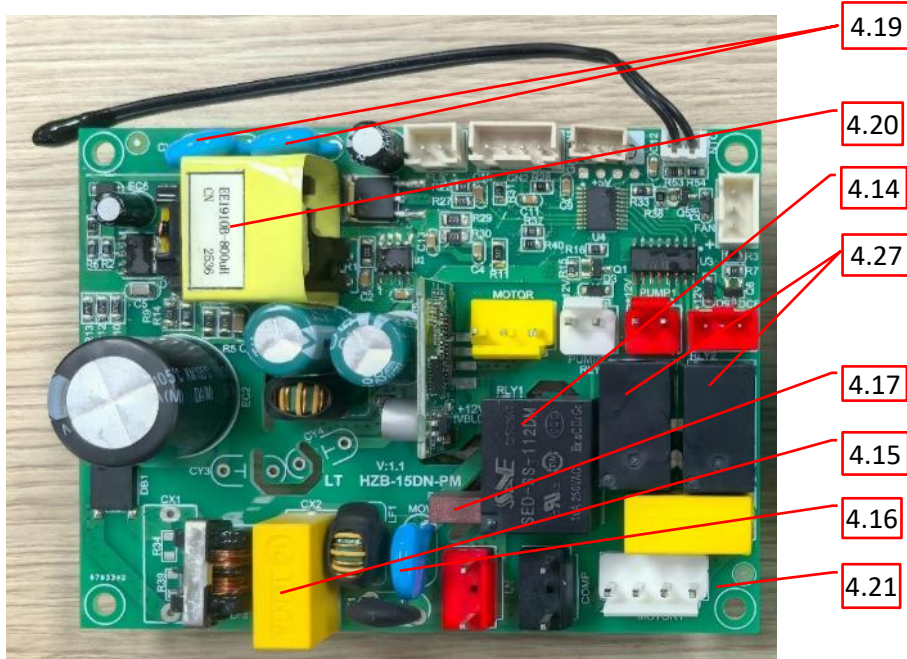


3.0 Product Photographs

Photo 4.16c -Alternative Main control PCB view (front) for all models except for HZB-15DN



Photo 4.16d - Main control PCB view for HZB-15DN



3.0 Product Photographs

Photo 4.16e - Main control PCB view for HZB-15DN

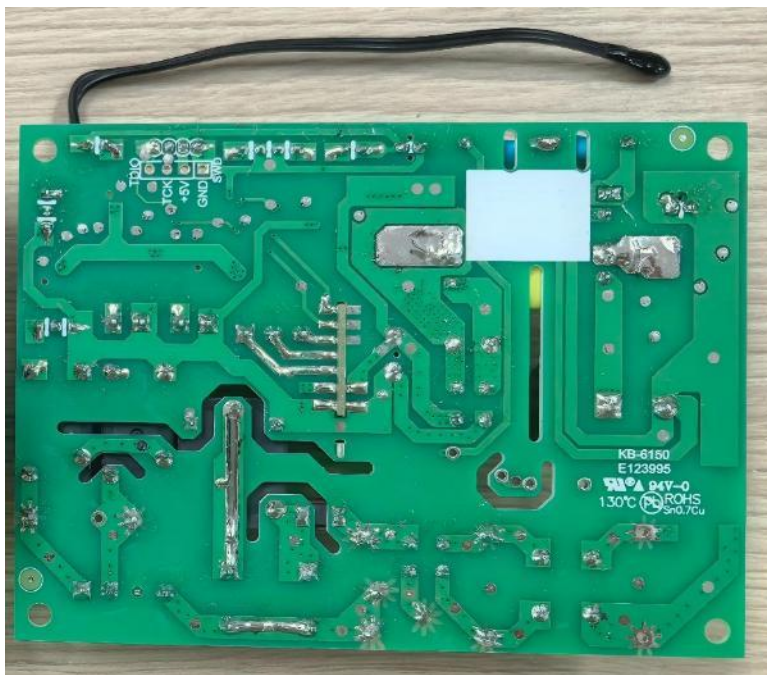
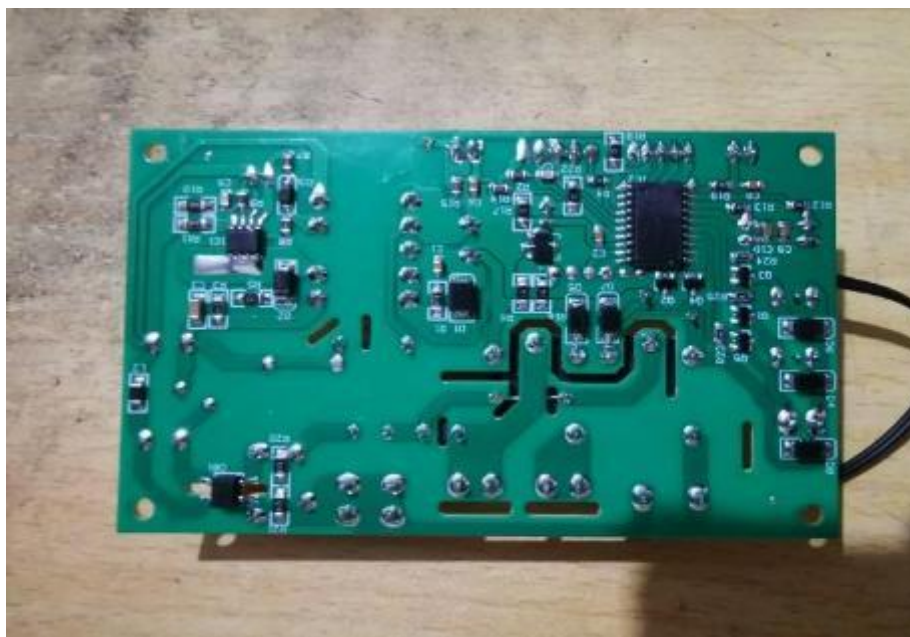


Photo 4.17a - Main control PCB view (rear) for HZB-*N, -*AN, -*BN, -*CN, -*DN series except for HZB-15DN



3.0 Product Photographs

Photo 4.17b -Alternative Main control PCB view (rear) for all models excpt for HZB-15DN

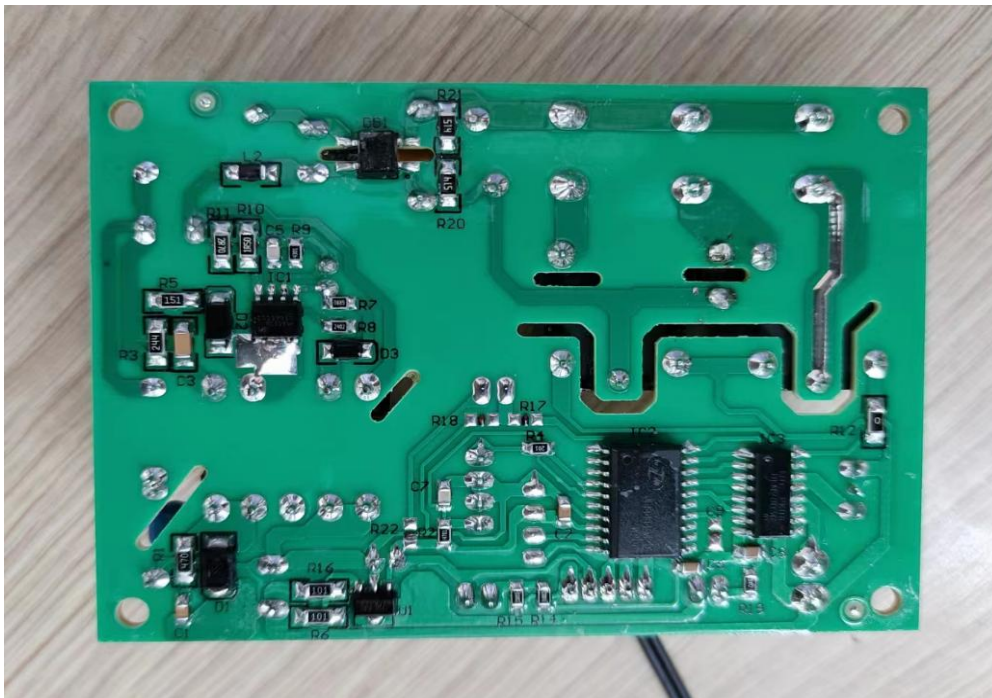


Photo 4.17c -Alternative Main control PCB view (rear) for all models except for HZB-15DN



3.0 Product Photographs

Photo 4.17d -Alternative Main control PCB for all models excpt for HZB-15DN

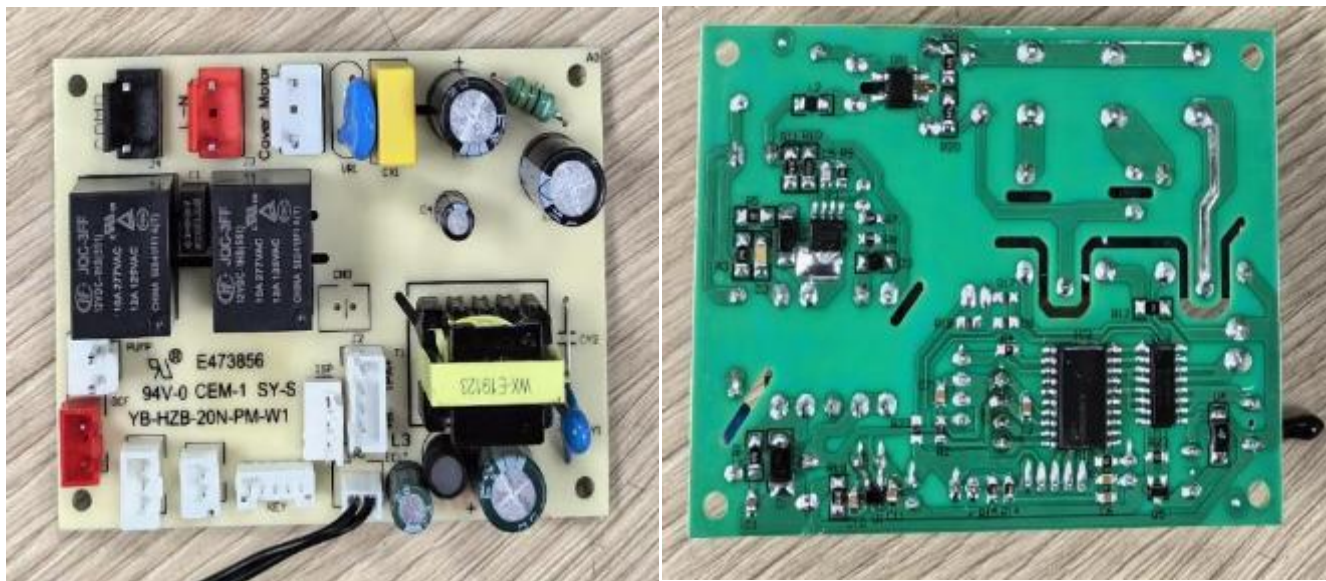


Photo 4.17e -Alternative Main control PCB for all models excpt for HZB-15DN

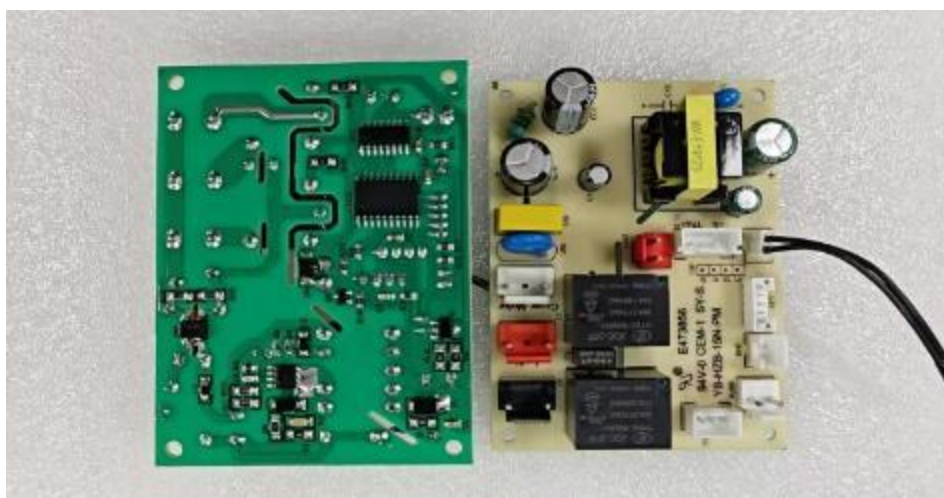
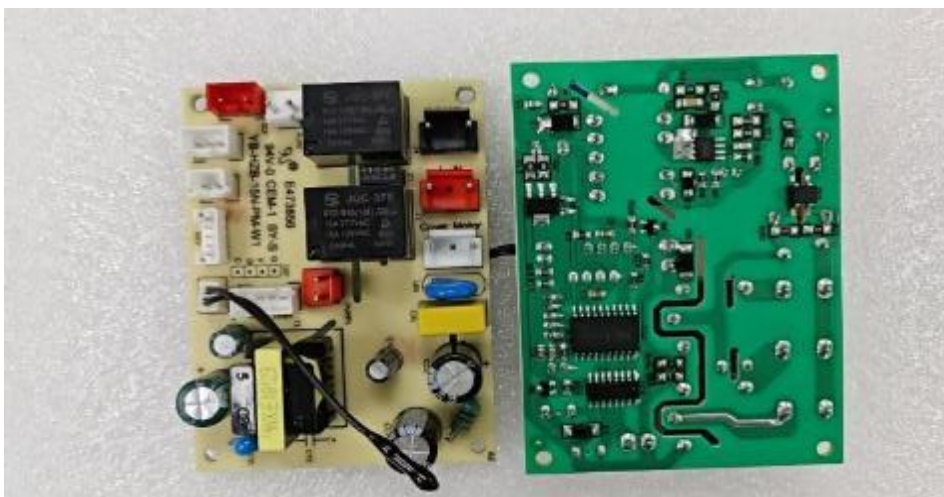


Photo 4.17f -Alternative Main control PCB for all models excpt for HZB-15DN



3.0 Product Photographs

Photo 4.17g - Alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN

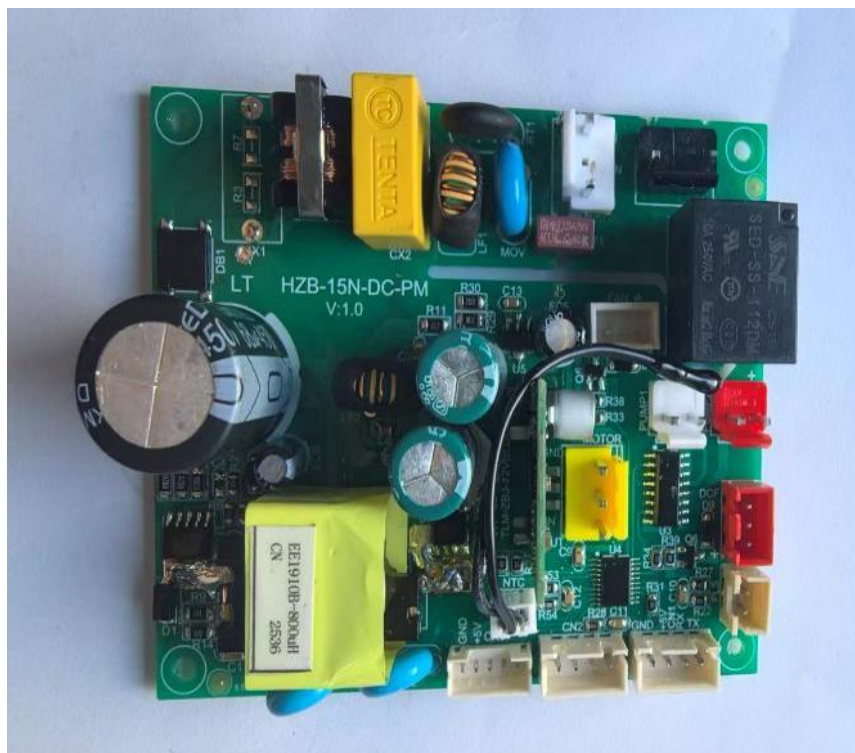
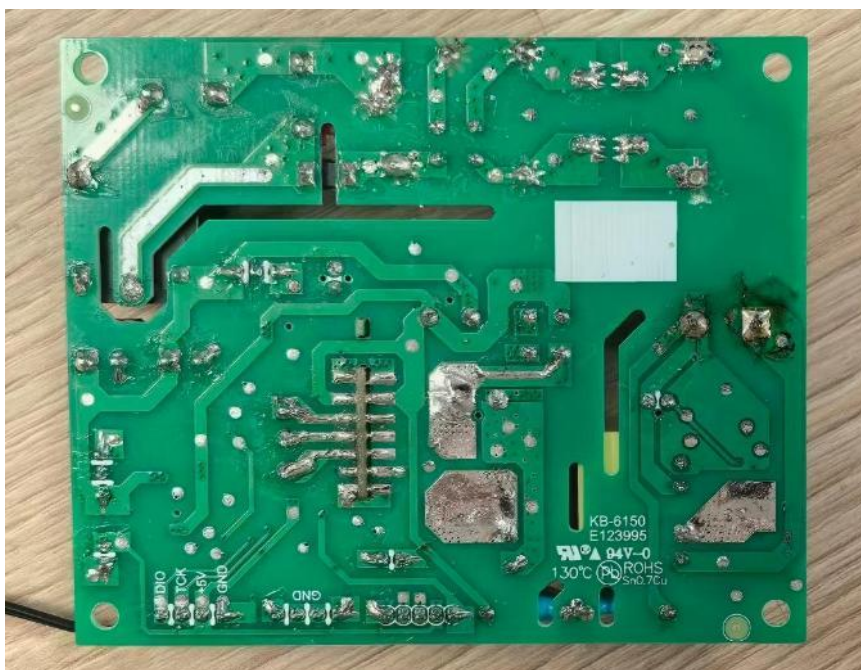


Photo 4.17h - Alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN



3.0 Product Photographs

Photo 4.17i - Alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN and HZB-20*N series (*=blank or letter A, B, C, D, E, F)



Photo 4.17j - Alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN and HZB-20*N series (*=blank or letter A, B, C, D, E, F)



3.0 Product Photographs

Photo 4.18 - Control panel PCB view for HZB-20N (front)



Photo 4.18a - Alternative Control panel PCB view for HZB-20N and HZB-**AN (front)

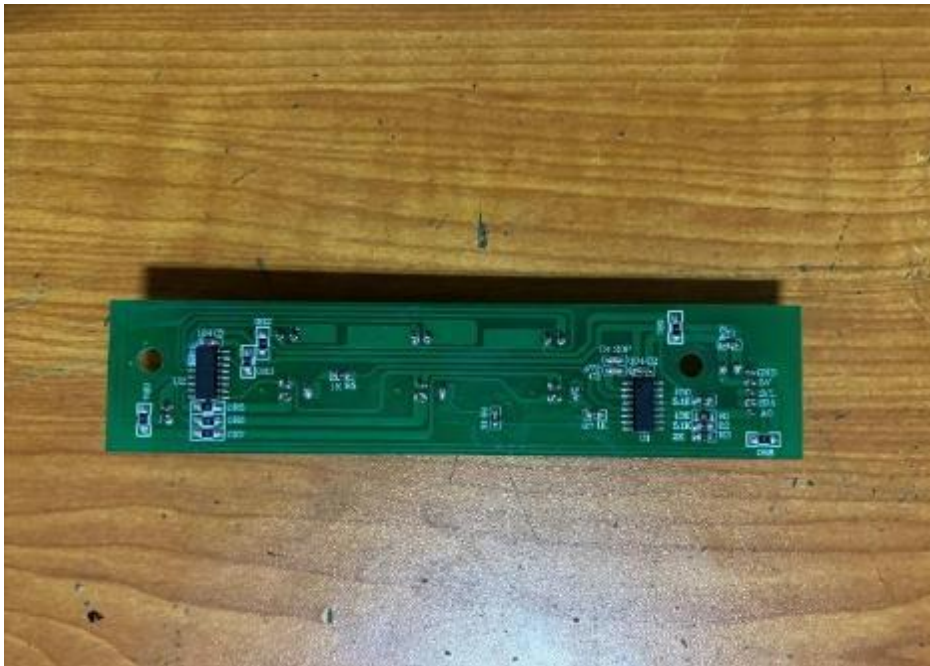


3.0 Product Photographs

Photo 4.19 - Control panel PCB view for HZB-20N (rear)



Photo 4.19a - Alternative Control panel PCB view for HZB-20N and HZB-**AN (rear)



3.0 Product Photographs

Photo 4.20 -Alternative Control panel PCB view (front) for all models



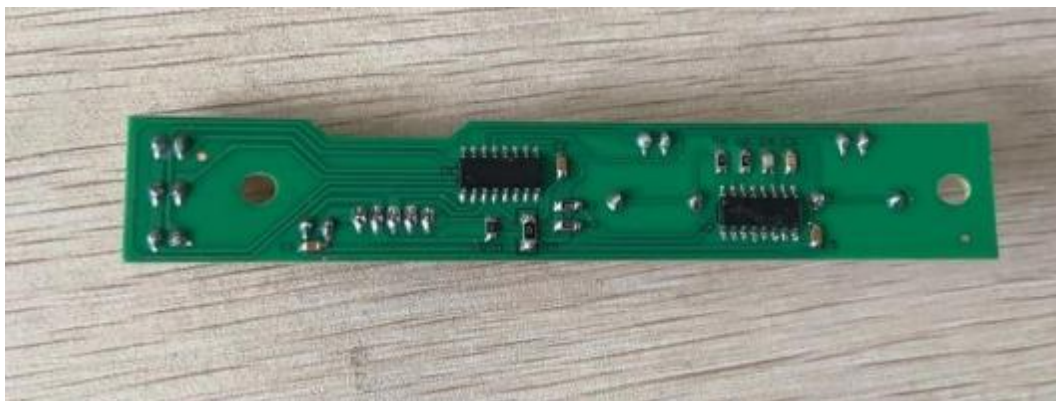
Photo 4.20a -Alternative Control panel PCB view (rear) for all models



Photo 4.20b - Control panel PCB view (front) for HZB-*CN series



Photo 4.20c - Control panel PCB view (rear) for HZB-*CN series



3.0 Product Photographs

Photo 4.20d - Control panel PCB view for HZB-20DN

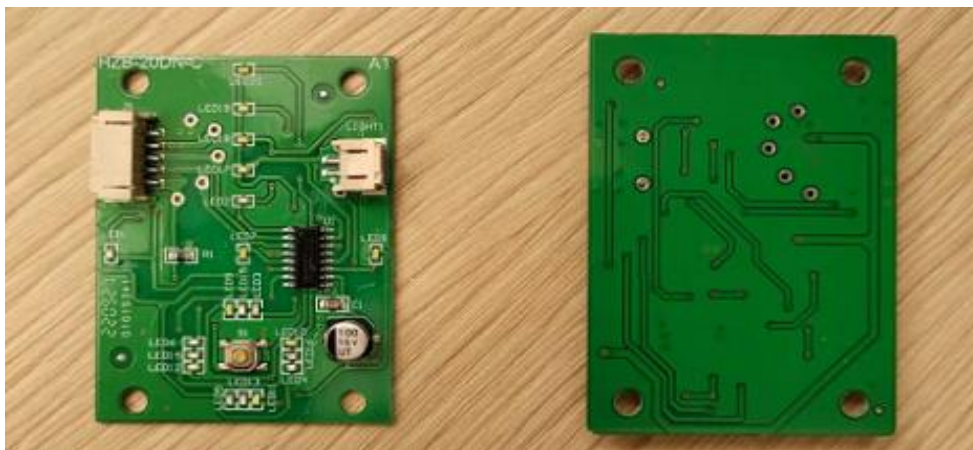


Photo 4.20e - Control panel PCB view for all models

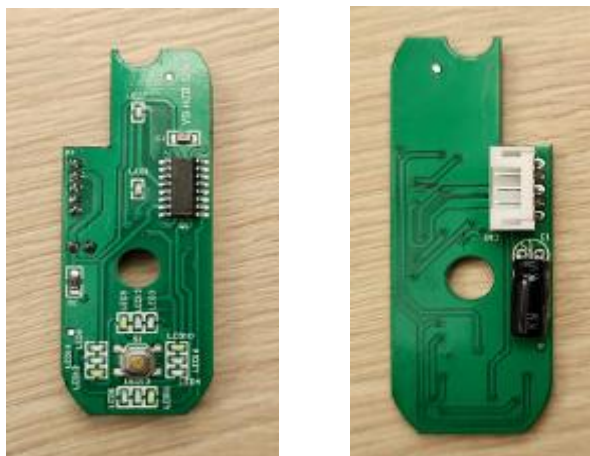


Photo 4.20f - Alternative control panel PCB view for all models



3.0 Product Photographs

Photo 4.20g - Alternative control panel PCB view for all models

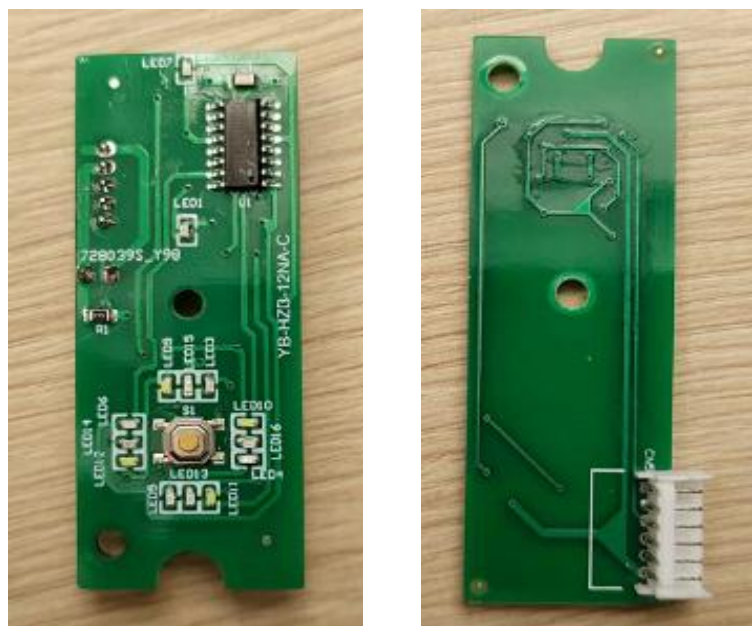


Photo 4.20h - Alternative control panel PCB view for all models



Photo 4.20i - Alternative control panel PCB view for all models



3.0 Product Photographs

Photo 4.20j - Alternative control panel PCB view for all models

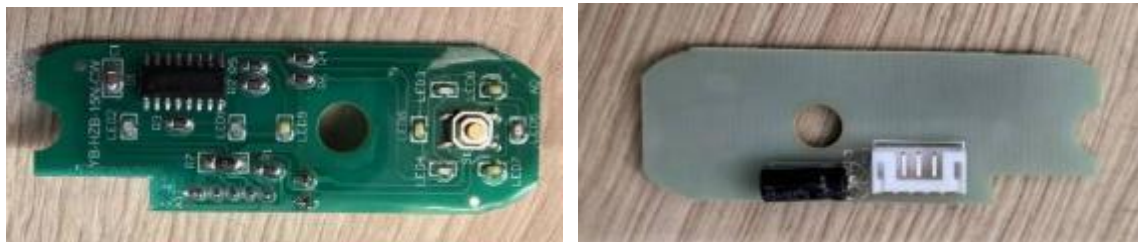


Photo 4.20k - WIFI module for all models



Photo 4.20l - Alternative control panel PCB view for all models



3.0 Product Photographs

Photo 4.20m - Alternative control panel PCB view for all models

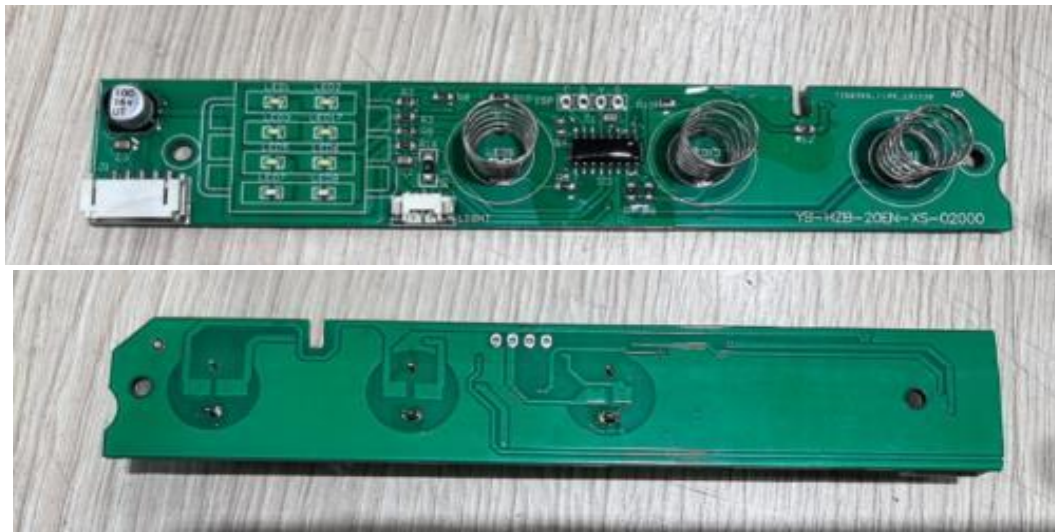


Photo 4.20n - Alternative control panel PCB view(front and rear) for HZB-15EN and HZB-20EN series



3.0 Product Photographs

Photo 4.20o - Control panel PCB view for HZB-15NF

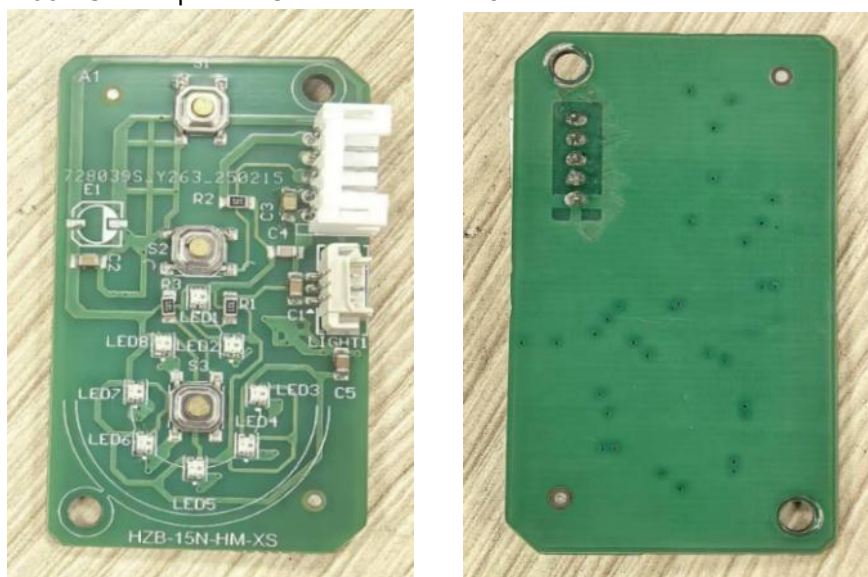


Photo 4.20p - Control panel PCB view for HZB-15DN with moving sensor

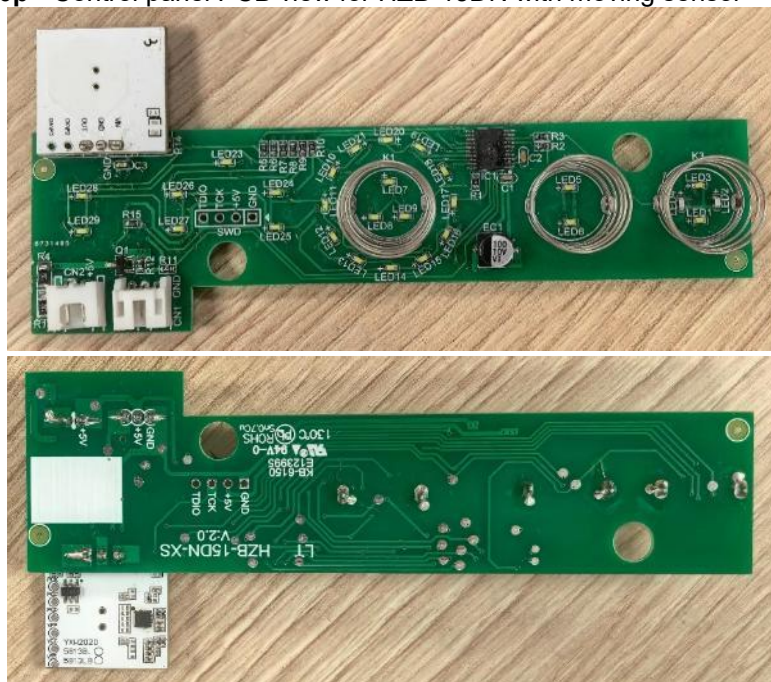
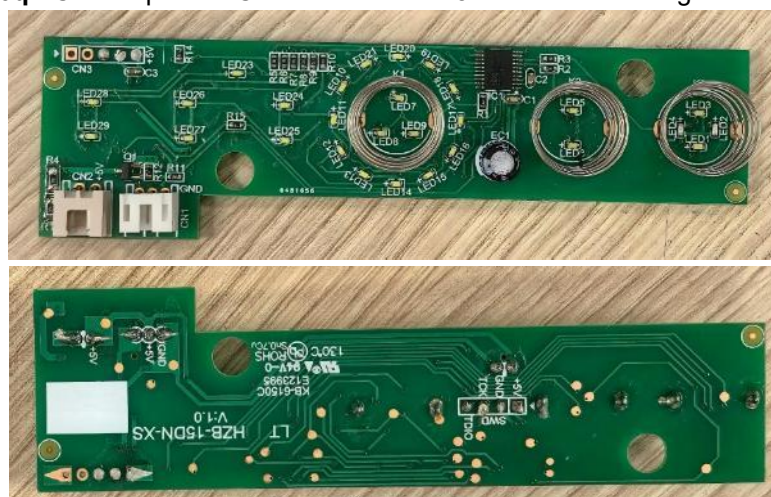
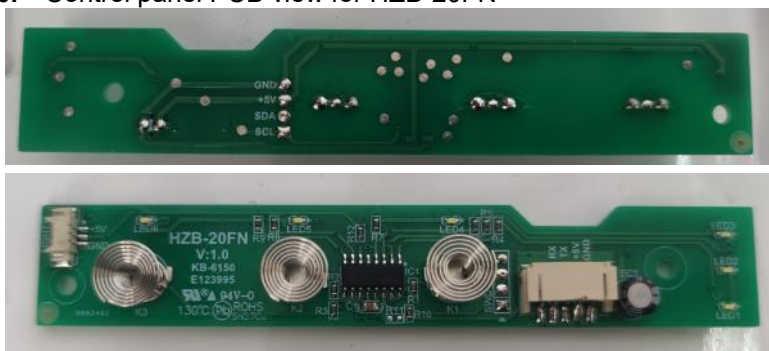


Photo 4.20q - Control panel PCB view for HZB-15DN without moving sensor



3.0 Product Photographs

Photo 4.20r - Control panel PCB view for HZB-20FN

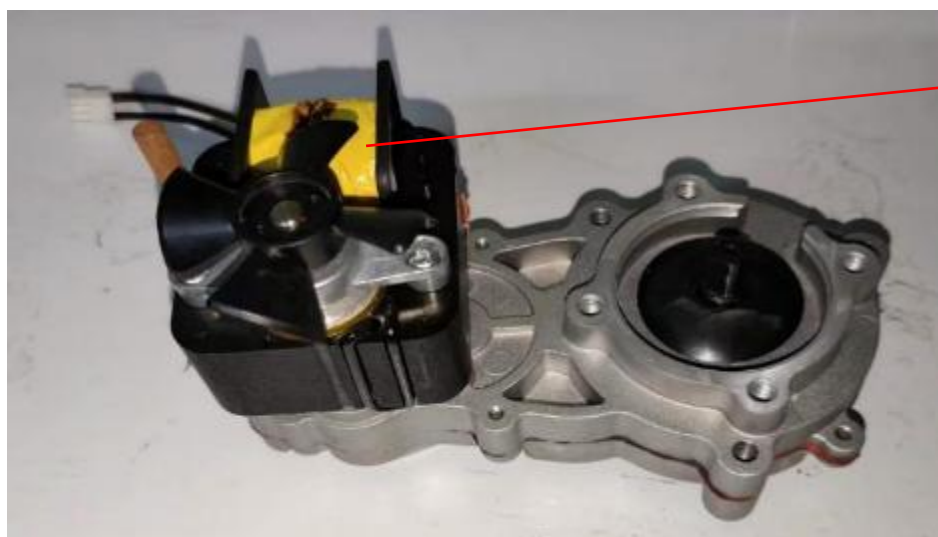


3.0 Product Photographs

Photo 4.21 - Ice pushing motor view for all models



Photo 4.22 - Ice pushing motor view for all models



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3.0 Product Photographs

Photo 4.23 - Alternative ice pushing motor view for all models

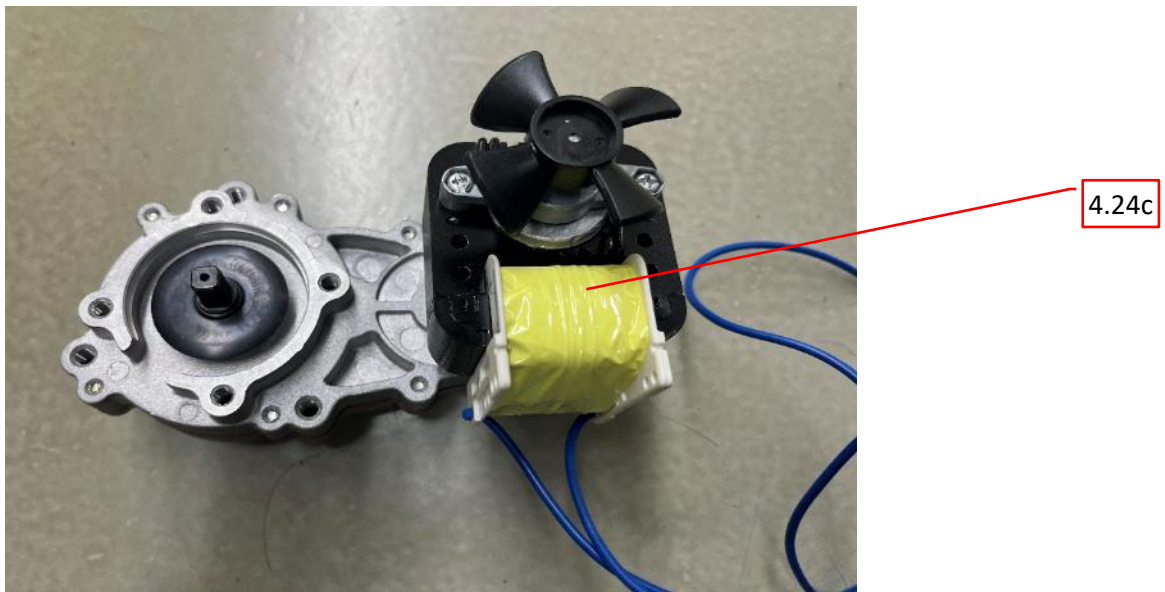
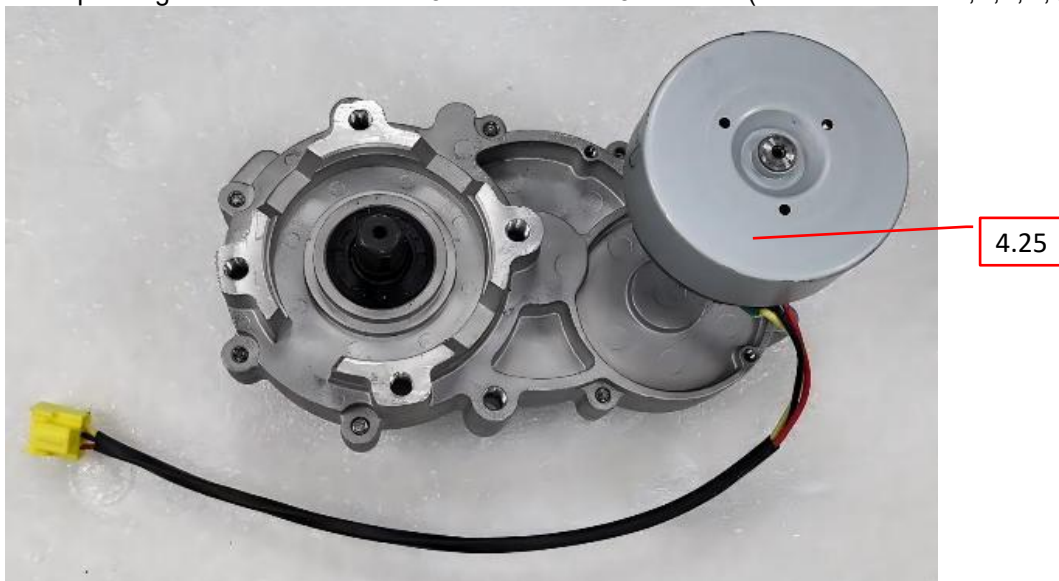


Photo 4.24 - Ice pushing motor view for HZB-15DN and HZB-15N* series (*=blank or letter A,B,F,H,G)



4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2.1	1	Plug	Various	Various	NEMA 5-15P	cURus
2.2	2	Power Cord	Various	SJT	3*18AWG, 300 or 600V, VW-1, 1.5-3 m length	cURus
2.2	3	Enclosure Plastic	NINGBO LG YONGXING CHEMICAL CO LTD	HI-121H	ABS, 2mm thickness, rated HB, RTI(60 60 60)	cURus
			LG CHEMICAL LTD	HI121	ABS, 2mm thickness, rated HB, RTI(95 95 95)	cURus
			BASF CO LTD	GP-22	ABS, 2mm thickness, rated HB, RTI(90 80 95)	cURus
			KUMHO PETROCHEMICAL	ABS-750	ABS, 2mm thickness, rated HB, RTI(70 70 70)	cURus
2.6, 3.7	4	Ice-melting Valve	ZHEJIANG SANHUA (MH29234)	FDF2A series	110V/115V/120V/110-120V, 50/60Hz	cURus
			ZHEJIANG ZHONGBAO (E254164)	FDF2A FDF2A-02C	110V/115V/120V/110-120V, 50/60Hz	cURus
			CHANGZHOU CHANGHENG LUSI (MH30067)	DTF-1	110V/115V/120V/110-120V, 50/60Hz	UR
				DTF-1-2A	110V/115V/120V/110-120V, 50/60Hz	cURus
				FDF-2A	110V/115V/120V/110-120V, 50/60Hz	cURus
			TIANCHANG TIANHAO (MH47312)	FDF-2A	110V, 50/60Hz	cURus
			ZHEJIANG DUNAN (E253737)	FDF2A Series	110V, 50/60Hz	cURus
			Changzhou Weigeer (MH64645)	FDF-2A12	110-120V, 50/60Hz	cURus
2.6	6	Condenser Coil	NINGBO HICON	Various	Copper, outside diameter 7mm, thickness 0.31mm.	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2.4, 3.3	8	Synchronous Motor	WUXI DEXUN FUDA MOTOR CO LTD / WUXI DEXUN MICRO MOTOR CO LTD	50TYZ-E	120V, 50/60Hz	cURus
			CHANGZHOU LEI LI ELECTRICAL EQUIPMENT CO LTD	50TYZ-JF1	120V, 50/60Hz	cURus
			NINGBO JIULING MOTOR CO LTD	49TYJ	110-120V, 50/60Hz	cURus
			NINGBO MING JONG ELECTRIC INDUSTRY CO LTD	MS	120V, 50/60Hz, 3.5W	cURus
			Ningbo Tianling (E494337)	49TYJ	100-120V, 50/60Hz.	cURus
			ZHAOQING CITY GAOYAO DISTRICT HENGJUN (E242178)	TY-50	100-120V, 50/60Hz, 4W.	cURus
2.4, 3.3, 3.1 0	9	Ice-dispensing Motor	WUXI DEXUN MICRO MOTOR CO LTD	50KTYZ	115V, 60Hz, 6W, Z.P	cURus
			NINGBO HICON	50KTYZ	110-120V, 50/60Hz, 7W, Z.P	See 5.0
2.7, 3.3	10	Condenser Fan Motor	XINRUILIAN (E186492)	RDH1225S	DC12V, 0.4A, ZP	cURus
			SHENZHEN HUAXIA HENGTAI (E254715)	YM1212PTS1	DC12V, 0.27A, ZP	cURus
			ZHONGSHAN HENGSHAN PLASTIC PRODUCTS CO LTD	FS120252H	DC12V, 0.3A, ZP	cURus
			YATE LOON (E189702)	D12SH-12	DC12V, 0.3A, ZP	cURus
			YOUNG LIN (E199993)	DFS122512H	DC12V, 0.28A, ZP	cURus
			SHENZHEN POWERYEAR (E348858)	PY-1225H12S	DC12V, 0.35A	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2.7, 3.6	11	Water Pump	DONGGUAN XINLINGLONG MOTOR & APPLIANCE MANUFACTURE R	XLL32ZWN12	DC12V, 0.3A	NR
			ZHONGSHAN WEILIBAO MOTOR & ELECTRIC APPLIANCE CO LTD	DB-2B0-11210	DC12V, 0.3A	NR
			NINGBO HICON	ZLWB-12	DC12V, 0.3A	NR
			ZHONGSHAN HENGSHAN PLASTIC PRODUCTS CO LTD	FS60202M	DC12V, 0.23A	NR
			NINGBO HICON	PA1	DC12V, 0.2A	NR
			NINGBO HICON	PV7	DC12V, 0.25A	NR
			SHENZHEN POWERYEAR	PA1	DC12V, 0.2A	NR
			SHENZHEN POWERYEAR	PV7	DC12V, 0.25A	NR
2.4, 3.5	12	PVC Sleeving	Various	Various	300V or 600V, 105°C, VW-1	cURus
2.4, 3.3	13	PWB Box	LG CHEMICAL LTD	AF312B	ABS, 2.5mm thickness, rated 5VA, RTI(75 70 75)	cURus
				AF365F	ABS, 2.0mm thickness, rated 5VA, RTI(85 85 80)	cURus
			CHI MEI CORPORATION	PA-765	ABS, 2.5mm thickness, rated 5VA, RTI(80 80 80)	cURus
				PA-765A	ABS, 2.5mm thickness, rated 5VA, RTI(80 80 80)	cURus
2.5 a, 3.4	14	Internal Wire	Various	1007	22-18AWG, 300V, 80°C, bound well by cabel ties.	cURus
			Various	1015	22-18AWG, 600V, Min. 80°C, bound well by cabel ties.	cURus
3.9	15	Evaporator	NINGBO HICON	Various	Copper, outside diameter 10mm, thickness 0.5mm	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2.1 1, 3.1 5	16	Relay	GOODSKY	RWH-SH-112DM	Min.5A, 120V/250V, 10E4.	cURus
			XIAMEN HONGFA	JQC-3FF HF3FF	Min.5A, 125V/250V/277V, 10E4.	cURus
			NINGBO SONGLE RELAY CO LTD	SRD-12VDC-SL-A	Min.5A, 125V/250V, 10E4.	cURus
			DONGGUAN SANYOU (E190598)	SRD-S-112DM series, SRD-SH-112DM Sereis	Min.5A, 125V/250V, 10E4.	cURus
			HSIN DA (E162117)	982-1A-12D	Min.5A, 125V/250V, 10E4.	cURus
			SONG CHUAN PRECISION CO LTD	833H-1C-C	Min.5A, 125V, 10E4.	cURus
			QUN LI RADIO APPLIANCE FACTORY	JQC-3FB	Min.5A, 120V or 250V, 10E4.	cURus
			NINGBO JINTIAN RELAY CO LTD	JQC-3FF	Min.5A, min. 120V or 125V, 10E4.	cURus
				HF3FF	Min.5A, min. 120V or 125V, 10E4.	cURus
			NINGBO ZETTLER (E319069)	JQC-3FF	Min.5A, 120V/125V/250V/277V, 10E4.	cURus
			HSIN DA (E162117)	943/943A-1A-12D	Min.5A, 125V/240V/250V, 10E4.	cURus
			YUEQING MEISHUO (E313266)	MPA-S-112-A	Min. 5A, 125V/240V/250V, 10E4.	cURus
			NINGBO TIANBO GANGLIAN ELECTRONICS CO LTD	HJR-3FF	Min. 5A, 120V or 125V, 10E4.	cURus
			WANGRONG ELECTRONICS (SHENZHEN) (E345228)	RD-112DM-A-S	Min 5A, 250/227V, 10E4.	cURus
			NINGBO HUILONGCANG (E215689)	973-12VDC-SL-A	Min 5A,125Vor 250V, 10E4.	cURus
			SHENZHEN YUANZE (E341498)	Y3F-SS-112DM	Min 5A,125Vor 250V, 10E4.	cURus
			DONGGUAN YONGNENG(E320522)	YX202-S-112DMF	Min 5A,125Vor 250V, 10E4.	cURus
			Shenzhen Golden Electrical (E321783)	GH-1A-12LSFT	Min. 5A, 120V or 125V, 10E4.	cURus
			Guoke Relay Factory(E359350)	GK3FF-12VDC-S-A	Min 5A,250V, 10E4.	cURus
			Hunan Sanyi Precision (E481527)	SED-SS-112DM	Min 5A,250V, 10E4.	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2.9, 3.1 5	17	Across-the-line Capacitor	Various	Various	0,1μF, 0.33μF, 0.56μF, min. 250V	cURus
2.9, 3.1 5	18	Varistor	Various	Various	330V	cURus
2.9, 3.1 5	20	Fuse	Various	Various	3.15A, 250V.	cURus
2.9, 3.1 6	21	Main PWB	Various	Various	Thickness: 1.5mm, V-0, 130°C	URus
2.9, 3.1 6	22	Quick-connect Terminals	Various	Various	Clamped at end of internal wires for connecting with terminals on PWB	cURus
2.1	23	Marking Label (not shown)	Various	Various	80°C.	URus
2.9, 3.1 5	24	Triacs	Various	Various	0.6A. For valve, syn. Motor	NR
2.9, 3.1 5	25	Optical Isolators	LITE-ON TECHNOLOGY CORP	MOC-3021 series	Providing 5000V isolation. This component be used together with Item 24 Triacs. For valve, syn. Motor	cURus
			FAIRCHILD SEMICONDUCTOR CORP	MOC3021 series	Providing 3750V isolation. For valve, syn. Motor	cURus
			EVERLIGHT ELECTRONICS CO LTD	EL3021 series	Providing 5000V isolation. For valve, syn. Motor	cURus
				ELT3021 series	Providing 5000V isolation. For valve, syn. Motor	cURus
			SHARP CORP ELECTRONIC COMPONENTS AND DEVICES GROUP	1S3021 series	Providing 5000V isolation. For valve, syn. Motor	cURus
			SHENZHEN ORIENT (E323844)	ORMOC3021S series	Providing 5000V isolation. For valve, syn. Motor	cURus
			JIEJIE MICROELECTRONICS (Shenzhen) (E521485)	JOC3021 series	Providing 5000V isolation. For valve, syn. Motor	cURus
			CT Microelectronics Far East (E364000)	CT3021 seires	Providing 5000V isolation. For valve, syn. Motor	cURus
			NingBo Qunxin Microelectronics Co., LTD (E509768)	QX3021 series, QX2021 series	Providing 5000V isolation.	cURus
			CRM ICBG (Wuxi) Co Ltd(E465130)	HK3021 series	Providing 5000V isolation	cURus
			Various	Various	Providing 5000V isolation. For valve, syn. Motor	cURus

4.0 Critical Components

Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
3.1 5	25a	Optical Isolators	EVERLIGHT ELECTRONICS CO LTD	817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
				EL817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
			SHARP CORP ELECTRONIC COMPONENTS AND DEVICES GROUP	PC817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
			FAIRCHILD SEMICONDUCTOR CORP	FOD817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
			LITE-ON TECHNOLOGY CORP	LTV817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
			Shenzhen Orient Components Co., Ltd.	OR817	Providing 5000V isolation. For transformer. Only for HZB-30D.	cURus
2.9, 3.1 5	26	Y Capacitor	Various	Various	Min 250V, 1.0nF or 2.2nF. 1 piece Y1 or 2 pieces Y1 or Y2 connected across pri. and sec. by soldering	cURus
2.9	27	Switching Transformer	Various	Various	Horizontally installed, vanish impregnated core, thickness 5,3mm by width 20,6mm by length 20,2mm, bobbin min. 1,6mm thickness. Primary winding Ø0,25mm, 90 turns, type MW79, rated min. 155°C, measured 1,0Ω at 12°C. Sec. winding 3 layers insulated wire Ø0,45mm, 14 turns, rated min. 130°C, measured 0,06Ω at 12°C. Vcc winding Ø0,25mm, 18 turns, rated min. 155°C, measured 0,25Ω at 12°C. Class 120. only for HZB-12E. Refer to illustration 4a for details.	NR
			Various	Various	Varnish impregnated core, thickness 4.8mm by width 19.0mm by height 16.4mm, bobbin min. 1.0mm thickness. Primary winding Ø0.18mm, 120 turns, rated min. 155°C, measured 2.42Ω at 28°C. Sec. winding 3 layers insulated wire Ø0.45mm, 15 turns, rated min. 130°C, measured 62.54mΩ at 28°C. Vcc winding Ø0.18mm, 18 turns, rated min. 155°C, measured 0.54Ω at 28°C. Class 130. Refer to illustration 4b for details.	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
3.1 5	27a	Switching Transformer	Various	Various	Vertical installed, vanish impregnated core. Primary winding Ø0.3mm, 84 turns, type MW75-C/2UEW QA-1, rated min. 130/155°C, measured 1.3Ω at 25°C. Sec. winding 3 layers insulated wire Ø0.5mm*2P, 12 turns, rated min. 130°C, measured 0.04Ω at 25°C. Vcc winding Ø0.25mm*2P, 15 turns, rated min. 155°C, measured 0.215Ω at 25°C. Class 120. Only for HZB-30D. Refer to illustration 4c for details.	NR
2.2 7	27b	Switching Transformer	Various	Various	E19 with thickness 9.9mm by width 20.0mm by length 16.1mm, bobbin min. 1.6mm thickness. Primary winding Ø0.33mm, 68turns, type MW79, rated min. 155°C, measured 0.74Ω at 25°C. Sec. winding 3 layers insulated wire Ø0.35mm*2P, 7turns, rated min. 155°C, measured 0.063 Ω at 25°C. Vcc winding Ø0.23mm*3P, 10turns, rated min. 155°C, measured 0.032 Ω at 25°C. Only for HZBY-12. Refer to illustration 4d, 4d1 for details.	NR
2.5, 2.5 a, 2.5 b	28	Compressor	HUAYI COMPRESSOR (JINGZHOU) CO LTD	L48C5L	110-120V, 60Hz, R600a. For HZB-12E, HZB-12EH, HZBY-12	cURus
			NINGBO ANUODAN MACHINERY CO LTD (SA33342)	HV48Y11A	110-120V, 60Hz, R600a. For models HZB-12E, HZB-12EH, HZBY-12.	cURus
			NINGBO ANUODAN MACHINERY CO LTD (SA33342)	HD48Y11A	110-120V, 60Hz, R600a. For models HZB-12E, HZB-12EH, HZBY-12.	cURus
2.6, 3.3	29	Water-inlet valve	Various	Various	DC12V. Secured by screw. For HZB-12EH, HZBY-12 and HZB-30D.	NR
3.1 7	30	Compressor	NINGBO ANUODAN MACHINERY CO LTD (SA33342)	QD32R11	110-120V, 60Hz, R290. For HZB-30D	cURus
2.2 4	31	DC step motor	Various	Various	12VDC. For model HZBY-12.	NR
4.1	4.1	Plug	Various	Various	NEMA 5-15P	cURus
4.1, 4.3 aa2 , 4.3 aa9	4.2	Power Cord	Various	SJT	3*18AWG, 300 or 600V, VW-1, 1.5-3 m length	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.1, 4.3 aa1, 4.3 aa6, 4.3 aa13	4.3	Enclosure Plastic	NINGBO LG YONGXING CHEMICAL CO LTD	HI-121H	ABS, 2mm thickness, rated HB, RTI(60 60 60)	cURus
			LG CHEMICAL LTD	HI121	ABS, 2mm thickness, rated HB, RTI(95 95 95)	cURus
			BASF CO LTD	GP-22	ABS, 2mm thickness, rated HB, RTI(90 80 95)	cURus
			KUMHO PETROCHEMICAL	ABS-750	ABS, 2mm thickness, rated HB, RTI(70 70 70)	cURus
4.8, 4.1 Or3	4.5	Internal Wire	Various	1015	22-18AWG, 600V, Min 80°C, bound well by cabel ties and routed in good way	cURus
			Various	1007	22-18AWG, 300V, 80°C, bound well by cabel ties and routed in good way	cURus
4.9, 4.1 Or2	4.6	PWB Box	LG CHEMICAL LTD	AF312B	ABS, 2.5mm thickness, rated 5VA, RTI(75 70 75)	cURus
				AF365F	ABS, 2.0mm thickness, rated 5VA, RTI(85 85 80)	cURus
			CHI MEI CORPORATION	PA-765	ABS, 2.5mm thickness, rated 5VA, RTI(80 80 80)	cURus
				PA-765A	ABS, 2.5mm thickness, rated 5VA, RTI(80 80 80)	cURus
4.9, 4.1 Or5	4.7	Water-inlet valve	Various	Various	DC12V. Secured by screw.	NR
4.9, 4.1 Od	4.8	Ice pushing motor	NINGBO HICON	SJ-0066/105JC640 G1312	120V, 60Hz, 11W, T.P.	See 5.0
4.9	4.9	Water Pump	DONGGUAN XINLINGLONG MOTOR & APPLIANCE MANUFACTURE R	XLL32ZWN12	DC12V, 0.3A	NR
			ZHONGSHAN WEILIBAO MOTOR & ELECTRIC APPLIANCE CO LTD	DB-2B0-11210	DC12V, 0.3A	NR
			NINGBO HICON	ZLWB-12	DC12V, 0.3A	NR
			ZHONGSHAN HENGSHAN PLASTIC PRODUCTS CO LTD	FS60202M	DC12V, 0.23A	NR
			NINGBO HICON	PA1	DC12V, 0.2A	NR
			SHENZHEN POWERYEAR	PA1	DC12V, 0.2A	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.9, 4.10b, 4.10r2	4.10	Condenser Fan Motor	XINRUILIAN	RDH1225S	DC12V, 0.4A, ZP	cURus
			SHENZHEN HUAXIA HENGTAI ELECTRONIC CO LTD	YM1212PTS1	DC12V, 0.27A, ZP	cURus
			ZHONGSHAN HENGSHAN PLASTIC PRODUCTS CO LTD	FS120252H	DC12V, 0.3A, ZP	cURus
			YATE LOON ELECTRONICS CO LTD	D12SH-12	DC12V, 0.3A, ZP	cURus
			YOUNG LIN TECH CO LTD	DFS122512H	DC12V, 0.28A, ZP	cURus
			SHENZHEN POWERYEAR TECHNOLOGY CO LTD	PY-1225H12S	DC12V, 0.35A	cURus
4.10, 4.10r4	4.11	Condenser Coil	NINGBO HICON	Various	Copper, outside diameter 7mm, thickness 0.31mm or outside diameter 5mm, thickness 0.20mm.	NR
4.11	4.12	Evaporator	NINGBO HICON	Various	Copper, outside diameter 6mm, thickness 0.5mm, length approximately 1700mm. Fixed around the external surface of ice mould (9 turns). For HZB-20N,20AN,20BN,20CN,20DN.	NR
4.11	4.12a	Evaporator	NINGBO HICON	Various	Copper, outside diameter 6mm, thickness 0.5mm, length approximately 760mm. Fixed around the external surface of ice mould (5 turns).for HZB-*N,*N/S,*NA,*NA/S,*NB,*NB/S,(*=12,15)	NR
4.11	4.12b	Evaporator	NINGBO HICON	Various	SUS tube welding around the external surface of ice mould, OD48mm, ID37mm, tube thickness 1.0mm. For all models	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.1 3, 4.1 3a, 4.1 3b, 4.1 Or1	4.13	Compressor	HUAYI COMPRESSOR (JINGZHOU) CO LTD	L48C5L	110-120V, 60Hz, R600a.	cURus
			NINGBO ANUODAN MACHINERY CO LTD (SA33342)	HV48Y11A	110-120V, 60Hz, R600a. For all models.	cURus
			HUAYI COMPRESSOR (JINGZHOU) CO LTD (SA13324)	M43C5L	110-120V, 60Hz, R600a. For all models.	cURus
			Hangzhou Qianjiang Refrigeration Compressor Group Co Ltd (SA33247)	UKN43YA	110-120V, 60Hz, R600a. For all models.	cURus
			NINGBO ANUODAN MACHINERY CO LTD (SA33342)	HD48Y11A	110-120V, 60Hz, R600a. For all models.	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.1 6a, 4.1 6d	4.14	Relay	GOODSKY	RWH-SH-112DM	Min.5A, 120V/250V, 10E4, secured to PWB by soldering.	cURus
			XIAMEN HONGFA (E314517)	JQC-3FF HF3FF	Min.5A, 125V/250V/277V, 10E4.	cURus
			NINGBO SONGLE RELAY CO LTD	SRD-12VDC-SL-A	Min.5A, 125V/250V, 10E4.	cURus
			DONGGUAN SANYOU (E190598)	SRD-S-112DM series SRD-SH-112DM Sereis	Min.5A, 125V/250V, 10E4.	cURus
			HSIN DA (E162117)	982-1A-12D	Min.5A, 125V/250V, 10E4.	cURus
			SONG CHUAN PRECISION CO LTD	833H-1C-C	Min.5A, 125V, 10E4.	cURus
			QUN LI RADIO APPLIANCE FACTORY	JQC-3FB	Min.5A, 120V or 5A, 250V, 10E4.	cURus
			NINGBO JINTIAN RELAY CO LTD	JQC-3FF	Min.5A, min. 120V or 125V, 10E4.	cURus
				HF3FF	Min.5A, min. 120V or 125V, 10E4.	cURus
			NINGBO ZETTLER (E319069)	JQC-3FF	Min.5A, 120V/125V/250V/277V, 10E4.	cURus
			HSIN DA (E162117)	943/943A-1A-12D	Min. 5A, 125V/250V, 10E4.	cURus
			YUEQING MEISHUO (E313266)	MPA-S-112-A	Min. 5A, 125V/240V/250V, 10E4.	cURus
			NINGBO TIANBO GANGLIAN ELECTRONICS CO LTD	HJR-3FF	Min. 5A, 120V or 125V, 10E4.	cURus
			WANGRONG ELECTRONICS (SHENZHEN) (E345228)	RD-112DM-A-S	Min 5A, 250/227V, 10E4.	cURus
			NINGBO HUILONGCANG (E215689)	973-12VDC-SL-A	Min. 5A, 125V or 250V, 10E4.	cURus
			SHENZHEN YUANZE (E341498)	Y3F-SS-112DM	Min. 5A, 125V or 250V, 10E4.	cURus
			DONGGUAN YONGNENG (E320522)	YX202-S-112DMF	Min. 5A, 125V or 250V, 10E4.	cURus
			Shenzhen Golden Electrical (E321783)	GH-1A-12LSFT	Min.5A, 120V/125V/250V/277V, 10E4	cURus
			Guoke Relay Factory(E359350)	GK3FF-12VDC-S-A	Min 5A,250V, 10E4.	cURus
				GK32F-12VDC-D-S-A		

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
			Hunan Sanyi Precision (E481527)	SED-SS-112DM	Min 5A,250V, 10E4.	cURus
4.1 6a, 4.1 6d	4.15	Across-the-line Capacitor	Various	Various	0.1μF or 0.22μF,0.33μF,0.56μF, min. 250V	cURus
4.1 6a, 4.1 6d	4.16	Varistor	Various	Various	330V	cURus
4.1 6a, 4.1 6d	4.17	Fuse	Various	Various	3.15A, 250V.	cURus
4.1 6a, 4.1 6d	4.19	Y Capacitor	Various	Various	Min 250V, 1.0nF or 2.2nF or 4.7nF. 1 or 2 pieces connected across pri. and sec. by soldering	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.1 6a, 4.1 6d	4.20	Switching Transformer	Various	Various	Varnish impregnated core, Thickness: 4.8mm by width 19.0mm by height 16.4mm, Thickness of bobbin: Min. 1.0mm. Primary winding: Ø0.18mm×120 turns, Rated Min. 155°C, Measured 2.42Ω at 28°C. Secondary winding: 3 layers insulated wire, Ø0.45mm×15 turns, Rated Min. 130°C, Measured 62.54mΩ at 28°C. Vcc. winding: Ø0.18mm×18 turns, Rated Min. 155°C, Measured: 0.54Ω at 28°C. Class 130 (B). Horizontally secured to PWB by soldering. Refer to illustration 4e, 4e1 for details.	NR
			Various	Various	Vertical installed, vanish impregnated core. Thickness 10mm by width 20.4mm by length 16.5mm, bobbin min. 0.5mm thickness. Primary winding Ø0.29mm, 75 turns, type MW75-C/2UEW, rated 155°C, measured 0.86Ω at 25°C. Sec. winding 3 layers insulated wire Ø0.75mm, 7 turns, rated min. 130°C, measured 0.01Ω at 25°C. Vcc winding Ø0.15mm, 7 turns, rated min. 155°C, measured 0.275Ω at 25°C. Class 120. Refer to illustration 4f, 4f1 for details.	NR
4.1 6a, 4.1 6d	4.21	Main PWB	Various	Various	1.5mm thickness, V-0, 130°C	URus
4.1 0e	4.22	Self-priming water pump (optional)	DUOJIA KEJI	DJGM-2	DC12V, 5W. Optional for self-priming models.	NR
			Ningbo Hebang Motor	DJGM-2	DC12V, 5W. Optional for self priming models.	NR
			Dongguan Jingzhun	JZ370L-9-1 JZ370L-9-2	DC12V, Optional for self priming models.	NR
			SHENZHEN SIMPUMP TECHNOLOGY CO.,LTD	S370D5-LP S370D7-LP S370D9-LP	DC12V. Optional for self priming models.	NR
4.1 0a, 4.1 0la	4.23	Water-inlet valve (optional)	Various	Various	DC12V. Optional for external water supply models.	NR
4.2 2	4.24	Ice pushing motor	NINGBO HICON	RY-CJY-616330-0006A	120V, 60Hz, 12W, T.P	See 5.0

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4.2 2	4.24 a	Ice pushing motor (Not shown)	NINGBO HICON	RY-CJY-616335-0008T	120V, 60Hz, 24W, T.P	See 5.0
4.2 2	4.24 b	Ice pushing motor (Not shown)	NINGBO HICON	RY-CJY-616335-0009L	120V, 60Hz, 19W, T.P, AL Magnet wire	See 5.0
4.2 3	4.24 c	Ice pushing motor (Not shown)	NINGBO HICON	RY-CJY-616330-0008L	120V, 60Hz, 18W, T.P, AL Magnet wire	See 5.0
4.2 4	4.25	Ice pushing motor	NINGBO HICON	YS-BL-58-1100T	DC12V, 15W, for HZB-15DN, HZB-15N series models and HZB-20*N series (*=blank or letter A, B, C, D, E, F)	NR
4.1 0r6	4.26	Ice-dispensing Motor	WUXI DEXUN MICRO MOTOR CO LTD	50KTYZ	115V, 60Hz, 6W, Z.P	cURus
			NINGBO HICON	50KTYZ	110-120V, 50/60Hz, 7W, Z.P	See 5.0
4.1 6d	4.27	Relay for Ice-dispensing Motor	NINGBO ZETTLER (E319069)	JT32F JT32F-G	Min. 3A, 120/125V~, 10E4	cURus
			Sanyou (E190598)	SJ-S-112DM SJ-SH-112DM	Min. 5A, 120/125V~, 10E4	cURus
			Zhejiang Meishuo (E358149)	MPD-S-112-A	Min.5A, 120V/125V/240V/250V, 10E4	cURus
			Xiamen Hongfa (E314517)	HF32FV series HF32FV-G series	Min.5A, 120V/125V/240V/250V, 10E4	cURus
			WANGRONG ELECTRONICS (SHENZHEN) (E345228)	RJ-SS-112DM1-S	Min. 5A, 240/250V/277~, 10E4,	cURus
			Guoke Relay Factory(E359350)	GK32F-12VDC-S-A GK32F-12VDC-D-S-A	Min.5A, 250V/277V, 10E4	cURus
			DONGGUAN YONGNENG(E320522)	YX201H-S-112DMF	Min.5A, 125/250V, 10E4	cURus
			Hunan Sanyi Precision (E481527)	32F-SS-112DM	Min 5A,250V,5E4	cURus
NOTES:						
1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.						
2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.						
3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.						
4) Item 4.1-4.27 are specially used for models HZB-**N, **NA, **NB, **AN, **BN, **CN, **DN series. Item 4.26 and 4.27 are used for HZB-15DN only.						

5.0 Critical Unlisted CEC Components

INSULATED COIL

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
4.9, 4.10, 4.10d	4.8	Ice pushing motor	NINGBO HICON	SJ-0066/105JC640G1312
Electrical Rating: 120V, 60Hz, 11W				Insulation class A
Component Standard used: UL 1004-1:2012 Ed.2+R:07Aug2018 UL 1004-3:2015 Ed.2+R:31Jan2018 CSA C22.2#77:2014 Ed.8+E1				

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Magnet wire	JIANGYIN SHUANGYU CABLE CO LTD (E320132)	xEIW, EIW, QZY- x/180	Polyester, MW 30-C, Class 180.
	ZHANGJIAGANG FUERLE ELECTRICAL CO LTD (E347484)	xEIW/180, QZY- x/180	Polyester, MW 30-C, Class 180.
	ZHANGJIAGANG FUERLE ELECTRICAL CO LTD (E347484)	xEIW/180, QZY- x/180	Polyester, MW 30-C, Class 180.
Bobbin	E I DUPONT DE NEMOURS & CO INC (E41938)	70G33L	PA66, RTI (130,120,130).
	E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	PA66, RTI (130,105,105).
	HENGDIAN GROUP TOSPO ENGINEERING PLASTICS CO LTD (E187910)	PA66	RTI (65,65,65).
Insulation tape	P LEO & CO LTD (E126174)	1P808, 1V808	130°C.
	XINFENG GHILLIE ELECTRICAL MATERIALS CO LTD (E326305)	JL-P208	130°C.
	3M COMPANY (E17385)	1350-1	130°C.
	JINGJIANG JINGYANG INSULATING PRODUCT CO LTD (E309872)	JY-133	130°C.

5.0 Critical Unlisted CEC Components						
Sleeving	P LEO & CO LTD (E195829)	2R-SG	VW-1, 600V, 200°C.			
	QIFURUI ELECTRONICS CO (E255609)	QFR-SF	VW-1, 600V, 200°C.			
	Guangdong Shunde Hongqiao Insulation Materials INC (E154902)	CSEEUL001	VW-1, 600V, 200°C.			
	ATKINS & PEARCE INC(EE63446)	1151-FR	VW-1, 600V, 200°C.			
	DONGGUAN YONGCHAO INSULATION MATERIAL CO LTD (E325767)	YC-15-25-40-70	VW-1, 600V, 200°C.			
	JIANGYIN YUANDA ELECTRICAL MATERIAL CO LTD (E249875)	FSG-3	VW-1, 600V, 200°C.			
Thermal protector	SENSATA TECHNOLOGIES (E15962)	17AM031A5-1262	120°C			
	Changzhou Changyue Electirc(E494408)	KW-A	120°C			
	GUANGDONG WELLKEY (E528692)	KW Series	120°C			
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)	BR-A1D	120°C			
		BR-A	120°C			
		BR-A2D	120°C			
		17AM-D	120°C			
	WINDING(S) RESISTANCE					
Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Winding	0.51	xEIW, EIW, QZY-x/180	/	120V	1A	6.5Ω at 25°C
VERIFICATION PROCESS						
Frequency: Annual	Test Site: CEC			Number of samples to test: 1		
Test Name		Test Parameters				
Winding resistance		See resistance per winding above.				
Dielectric Strength		Apply voltage Between		Test Voltage		Test Time
		Winding to core		1240V		60s

5.0 Critical Unlisted CEC Components				
INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
4.22	4.24	Ice pushing motor	NINGBO HICON	RY-CJY-616330-0006A
Electrical Rating: 120V, 60Hz, 12W				Insulation class A
Component Standard used: UL 1004-1:2012 Ed.2+R:05Nov2020 UL 1004-3:2015 Ed.2+R:31Jan2018 CSA C22.2#77:2014 Ed.8+E1				
MATERIALS LIST				
Component	Manufacturer	Type/model	Dimensions/thickness/assembly information	
Magnet wire	JIANGYIN SHUANGYU CABLE CO LTD (E320132)	xEIW, EIW, QZY-x/180	Polyester, MW 30-C, Class 180.	
	SHENZHEN DAYANG INDUSTRY CO LTD (E176101)	xEIW/180, QZY-x/180	Polyester, MW 30-C, Class 180.	
	ZHANGJIAGANG FUERLE ELECTRICAL CO LTD (E347484)	xEIW/180, QZY-x/180	Polyester, MW 30-C, Class 180.	
Bobbin	E I DUPONT DE NEMOURS & CO INC (E41938)	70G33L	PA66, RTI (130,120,130).	
	E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	PA66, RTI (130,105,105).	
	HENGDIAN GROUP TOSPO ENGINEERING PLASTICS CO LTD (E187910)	PA66	RTI (65,65,65).	
Insulation tape	P LEO & CO LTD (E126174)	1P808, 1V808	130°C.	
	JINGYANG INSULATING PRODUCT CO LTD (E309872)	JY-133	130°C.	
	3M COMPANY (E17385)	1350-1	130°C.	
	XINFENG GHILLIE ELECTRICAL MATERIALS CO LTD (E326305)	JL-P208	130°C.	

5.0 Critical Unlisted CEC Components

Sleeving	P LEO & CO LTD (E195829)	2R-SG	VW-1, 600V, 200°C.
	QIFURUI ELECTRONICS CO (E255609)	QFR-SF	VW-1, 600V, 200°C.
	Guangdong Shunde Hongqiao Insulation Materials INC (E154902)	CSEEUL001	VW-1, 600V, 200°C.
	ATKINS & PEARCE INC(E63446)	1151-FR	VW-1, 600V, 200°C.
	JIANGYIN YUANDA ELECTRICAL MATERIAL CO LTD (E249875)	FSG-3	VW-1, 600V, 200°C.
	DONGGUAN YONGCHAO INSULATION MATERIAL CO LTD (E325767)	YC-15-25-40-70	VW-1, 600V, 200°C.
Thermal protector	SENSATA TECHNOLOGIES (E15962)	17AM031A5-1262	120°C
	Changzhou Changyue Electirc(E494408)	KW-A	120°C
	GUANGDONG WELLKEY (E528692)	KW Series	120°C
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)	BR-A1D	120°C
		17AM-D	120°C
		BR-A	120°C
		BR-A2D	120°C

WINDING(S) RESISTANCE

Winding Designation	Wire Size (mm ²)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Winding	0.41	xEIW, EIW, QZY-x/180	680	120V	0.93A	10.9Ω at 25°C

VERIFICATION PROCESS

Frequency: Annual	Test Site: CEC		Number of samples to test: 1
Test Name	Test Parameters		
Winding resistance	See resistance per winding above.		
Dielectric Strength	Apply voltage Between	Test Voltage	Test Time
	Winding to core	1240V	60s

5.0 Critical Unlisted CEC Components				
INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
4.22	4.24a	Ice pushing motor (Not shown)	NINGBO HICON	RY-CJY-616335-0008T
Electrical Rating:			120V, 60Hz, 24W	Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:05Nov2020 UL 1004-3:2015 Ed.2+R:12Jan2023 CSA C22.2#77:2014 Ed.8+E1		
MATERIALS LIST				
Component		Manufacturer	Type/model	Dimensions/thickness/assembly information
Magnet wire		JIANGYIN SHUANGYU CABLE CO LTD (E320132)	xEIW, EIW, QZY-x/180	Polyester, MW 30-C, Class 180.
		SHENZHEN DAYANG INDUSTRY CO LTD (E176101)	xEIW/180, QZY-x/180	Polyester, MW 30-C, Class 180.
		ZHANGJIAGANG FUERLE ELECTRICAL CO LTD (E347484)	xEIW/180, QZY-x/180	Polyester, MW 30-C, Class 180.
Bobbin		E I DUPONT DE NEMOURS & CO INC (E41938)	70G33L	PA66, RTI (130,120,130).
		E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	PA66, RTI (130,105,105).
		HENGDIAN GROUP TOSPO ENGINEERING PLASTICS CO LTD (E187910)	PA66	RTI (65,65,65).
Insulation tape		P LEO & CO LTD (E126174)	1P808, 1V808	130°C.
		JINGYANG INSULATING PRODUCT CO LTD (E309872)	JY-133	130°C.
		3M COMPANY (E17385)	1350-1	130°C.
		XINFENG GHILLIE ELECTRICAL MATERIALS CO LTD (E326305)	JL-P208	130°C.

5.0 Critical Unlisted CEC Components			
Sleeving	P LEO & CO LTD (E195829)	2R-SG	VW-1, 600V, 200°C.
	QIFURUI ELECTRONICS CO (E255609)	QFR-SF	VW-1, 600V, 200°C.
	Guangdong Shunde Hongqiao Insulation Materials INC (E154902)	CSEEUL001	VW-1, 600V, 200°C.
	ATKINS & PEARCE INC(EE63446)	1151-FR	VW-1, 600V, 200°C.
	JIANGYIN YUANDA ELECTRICAL MATERIAL CO LTD (E249875)	FSG-3	VW-1, 600V, 200°C.
	DONGGUAN YONGCHAO INSULATION MATERIAL CO LTD (E325767)	YC-15-25-40-70	VW-1, 600V, 200°C.
Thermal protector	SENSATA TECHNOLOGIES (E15962)	17AM031A5-1262	120°C
	Changzhou Changyue Electirc(E494408)	KW-A	120°C
	GUANGDONG WELLKEY (E528692)	KW Series	120°C
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)	BR-A1D	120°C
		17AM-D	120°C
		BR-A	120°C
		BR-A2D	120°C

WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm ²)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Winding	0.45	xEIW, EIW, QZY-x/180	580	120V	1.1A	8.5Ω at 25°C

VERIFICATION PROCESS			
Frequency: Annual	Test Site: CEC		Number of samples to test: 1
Test Name	Test Parameters		
Winding resistance	See resistance per winding above.		
Dielectric Strength	Apply voltage Between		Test Voltage
	Winding to core		Test Time

5.0 Critical Unlisted CEC Components				
INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
4.22	4.24b	Ice pushing motor (Not shown)	NINGBO HICON	RY-CJY-616335-0009L
Electrical Rating: 120V, 60Hz, 19W				Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:05Nov2020 UL 1004-3:2015 Ed.2+R:12Jan2023 CSA C22.2#77:2014 Ed.8+E1		
MATERIALS LIST				
Component		Manufacturer	Type/model	Dimensions/thickness/assembly information
Magnet wire		JIANGYIN SHUANGYU CABLE CO LTD (E320132)	xEIW(AL), EIW(AL), QZY(L)-x/180	Polyester, Al, Class 180.
		JIANGYIN DOUBLE FEATHER (E320132)	xEI/AIW(AL)/220 or Q(ZY/XY)L-x/220	polyester-imide, Al, Class 220.
		GUANGDONG WELLKEY ELECTRIC MATERIAL CO LTD (E211138)	xEI/AIWA-220, QZY/XY-x(L)-220	polyester-imide, Al, Class 200.
			xEIW/A [QZY-x/(L)]	polyester-imide, Al, Class 180.
Bobbin		E I DUPONT DE NEMOURS & CO INC (E41938)	70G33L	PA66, RTI (130,120,130).
		E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	PA66, RTI (130,105,105).
		HENGDIAN GROUP TOSPO ENGINEERING PLASTICS CO LTD (E187910)	PA66	RTI (65,65,65).
Insulation tape		P LEO & CO LTD (E126174)	1P808, 1V808	130°C.
		JINGYANG INSULATING PRODUCT CO LTD (E309872)	JY-133	130°C.
		3M COMPANY (E17385)	1350-1	130°C.
		XINFENG GHILLIE ELECTRICAL MATERIALS CO LTD (E326305)	JL-P208	130°C.

5.0 Critical Unlisted CEC Components			
Sleeving	P LEO & CO LTD (E195829)	2R-SG	VW-1, 600V, 200°C.
	QIFURUI ELECTRONICS CO (E255609)	QFR-SF	VW-1, 600V, 200°C.
	Guangdong Shunde Hongqiao Insulation Materials INC (E154902)	CSEEUL001	VW-1, 600V, 200°C.
	ATKINS & PEARCE INC(EE63446)	1151-FR	VW-1, 600V, 200°C.
	JIANGYIN YUANDA ELECTRICAL MATERIAL CO LTD (E249875)	FSG-3	VW-1, 600V, 200°C.
	DONGGUAN YONGCHAO INSULATION MATERIAL CO LTD (E325767)	YC-15-25-40-70	VW-1, 600V, 200°C.
Thermal protector	SENSATA TECHNOLOGIES (E15962)	17AM031A5-1262	120°C
	Changzhou Changyue Electirc(E494408)	KW-A	120°C
	GUANGDONG WELLKEY (E528692)	KW Series	120°C
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)	BR-A1D	120°C
		17AM-D	120°C
		BR-A	120°C
		BR-A2D	120°C

WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm ²)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Winding	0.55	Al	640	120V	0.85A	11.1Ω at 25°C

VERIFICATION PROCESS					
Frequency:	Annual	Test Site:	CEC	Number of samples to test:	1
Test Name		Test Parameters			
Winding resistance		See resistance per winding above.			
Dielectric Strength		Apply voltage Between		Test Voltage	Test Time
		Winding to core		1240V	60s

5.0 Critical Unlisted CEC Components				
INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
4.23	4.24c	Ice pushing motor	NINGBO HICON	RY-CJY-616330-0008L
Electrical Rating:		120V, 60Hz, 18W		Insulation class A
UL 1004-1:2012 Ed.2+R:05Nov2020				
Component Standard used: UL 1004-3:2015 Ed.2+R:12Jan2023				
CSA C22.2#77:2014 Ed.8+E1				
MATERIALS LIST				
Component	Manufacturer	Type/model	Dimensions/thickness/assembly information	
Magnet wire	JIANGYIN SHUANGYU CABLE(E320132)	xEIW(AL), EIW(AL), QZY(L)-x/180	Polyester, Al, Class 180.	
	GUANGDONG WELLKEY ELECTRIC MATERIAL CO LTD (E211138)	xEIW/A [QZY-x/(L)]	polyester-imide, Al, Class 180.	
		xEI/AIWA-220, QZY/XY-x(L)-220	polyester-imide, Al, Class 220.	
	JIANGYIN DOUBLE FEATHER (E320132)	xEI/AIW(AL)/220 or Q(ZY/XY)L-x/220	polyester-imide, Al, Class 220.	
Bobbin	E I DUPONT DE NEMOURS & CO INC (E41938)	70G33L	PA66, RTI (130,120,130).	
	E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	PA66, RTI (130,105,105).	
	HENGDIAN GROUP TOSPO ENGINEERING PLASTICS CO LTD (E187910)	PA66	RTI (65,65,65).	
Insulation tape	P LEO & CO LTD (E126174)	1P808	130°C.	
		1V808	130°C.	
	JINGYANG INSULATING PRODUCT CO LTD (E309872)	JY-133	130°C.	
	XINFENG GHILLIE (E326305)	JL-P208	130°C.	
	3M COMPANY (E17385)	1350-1	130°C.	

5.0 Critical Unlisted CEC Components			
Sleeving	P LEO & CO LTD (E195829)	2R-SG	VW-1, 600V, 200°C.
	QIFURUI ELECTRONICS CO (E255609)	QFR-SF	VW-1, 600V, 200°C.
	JIANGYIN YUANDA ELECTRICAL MATERIAL CO LTD (E249875)	FSG-3	VW-1, 600V, 200°C.
	DONGGUAN YONGCHAO INSULATION MATERIAL CO LTD (E325767)	YC-15-25-40-70	VW-1, 600V, 200°C.
	Guangdong Shunde Hongqiao Insulation Materials INC (E154902)	CSEEUL001	VW-1, 600V, 200°C.
	ATKINS & PEARCE INC(E63446)	1151-FR	VW-1, 600V, 200°C.
Thermal protector	SENSATA TECHNOLOGIES (E15962)	17AM031A5-1262	120°C
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)	BR-A1D	120°C
		17AM-D	120°C
		BR-A	120°C
		BR-A2D	120°C
	Changzhou Changyue Electirc(E494408)	KW-A	120°C
	GUANGDONG WELLKEY (E528692)	KW Series	120°C
Electrical Insulation Systems	Guangdong Zhaoli Motor(E327403)	ZHAOLI130	Class 130(B)

WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm ²)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Winding	0.45	Al	760	120V	0.9A	16.1Ω at 25°C
VERIFICATION PROCESS						
Frequency: Annual	Test Site: CEC			Number of samples to test: 1		
Test Name		Test Parameters				
Winding resistance		See resistance per winding above.				
Dielectric Strength	Apply voltage Between			Test Voltage		Test Time
	Winding to core			1240V		60s

5.0 Critical Unlisted CEC Components							
INSULATED COIL							
Photo #	Item no.	Name	Manufacturer/Trademark		Type / model		
2.4, 3.3, 3.10	9	Ice-dispensing Motor	NINGBO HICON		50KTYZ		
4.10r6	4.26						
Electrical Rating:			110-120V, 50/60Hz, 7W		Insulation class A		
Component Standard used:			UL 1004-1:2012 Ed.2+R:05Nov2020				
			UL 1004-2:2014 Ed.2+R:09May2024				
			CSA C22.2#77:2014 Ed.8+E1				
MATERIALS LIST							
Component		Manufacturer	Type/model	Dimensions/thickness/assembly information			
Bobbin		NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD	T302	PBT+30%GF, rated V-0, min. thickness 0.8mm, HWI(4), HAI(0), RTI(75, 75, 75). E152381			
		Ningbo Huateng Shouyan Hightech Co Ltd	301-G20F	PBT+20%GF, rated V-0, min. thickness 0.8mm, HWI(3), HAI(0), RTI(75, 75, 75). E255317			
		NANTONG ZHONGLAN ENGINEERING PLASTICS CO LTD	201-G30-202	PBT+30%GF, rated V-0, min. thickness 0.75mm, HWI(3), HAI(0), RTI(75, 75, 75). E255317			
Tape		3M COMPANY ELECTRICAL MARKETSDIV (EMD)	1350F-1	Rated 130°C, Flame Retardant. E17385			
		JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	Rated 130°C, Flame Retardant. E246950			
Windings		ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	xUEW/155	Rated 155°C. E222214			
		HUZHOU YUDA CABLE CO LTD	xUEW/155	Rated 155°C. E364268			
Sleeving		VARIOUS	VARIOUS	VW-1, 600V, 200°C			
Motor leads		VARIOUS	1015/1569	Min. 24AWG, VW-1, 300/600V, 105°C.			
WINDING(S) RESISTANCE							
Winding Designation	Wire Size (mm)		Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Windings	Ø0.08		xUEW/155	4200	115	7W	1520Ω (20°C)
VERIFICATION PROCESS							
Frequency: Annual		Test Site: CEC			Number of samples to test: 1		
Test Name		Test Parameters					
Winding resistance		See resistance per winding above.					
Dielectric Strength		Apply voltage Between		Test Voltage		Test Time	
		Winding to core		1240V		60s	

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification

body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - In primary circuits, 1.6 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and 6.4 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. Accessibility of Live Parts - All uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord.
6. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 22 AWG, with a minimum rating of 300V, 80°C.
7. Schematics - NA
8. Markings - The product is marked on as labeling system as described in item no. 23 of Section 4.0 as follows: applicant's name or brand name, model number, date of manufacturer, electrical ratings (voltage, frequency, current), refrigerant name, mass and design pressure.
Refer to Section 2.0 for detailed electrical ratings.
9. Cautionary Markings - Refer to Illustrations No. 3 for details.
10. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer.

Refer to Illustrations No. 2-2i for details.
11. ML model similarity - Instructions for installation and use of this product are provided by the manufacturer. For M/L No. 7, Curtis International Ltd.
For models ICE227- followed by up to fifteen letters, brand name is IGLOO;
For models EFIC227- or EFIC227- or EFIC235- or EFIC237- followed by up to fifteen letters, brand name is FRIGIDAIRE, FRIGIDAIRE GALLERY.
The undefined letters indicate color.
12. Logo Dependent Marking - The required marking is dependent on the specific ETL logo applied to the product as authorized by the Authorization to Mark. All products bearing the ETLus logo is not required for French translation.

6.0 Critical Features

13. Transformer - Supplier records must be provided that indicate the received shipment of transformers (section 4.0, item 27, 27a, 27b, 4.20) was constructed as indicated in Illustration 4a, 4b, 4c, 4d, 4d1, 4e, 4e1, 4f, 4f1. These records must be available at the installing factory for inspection on each received shipment.

7.0 Illustrations

Illustration No. 2 - Instructions

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USER MANUAL

ICE MAKER

With automatic ice-cube dispenser

Model: HZB-12D



7.0 Illustrations

Illustration No. 2a - (continued)

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7.0 Illustrations

Illustration No. 2b - (continued)

IMPORTANT SAFETY INSTRUCTIONS

Your safety and the safety of others are very important.

We have provided many important safety messages manual and your appliance.
Always read and obey all safety messages.

This is the safety alert symbol:



All safety messages will follow the safety alert symbol and the word "DANGER" or "WARNING".

 **DANGER**

 **WARNING**

These words mean:

You can be killed or seriously injured if you don't immediate follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

7.0 Illustrations

Illustration No. 2c - (continued)

PREPARING YOUR ICE MAKER FOR USE

IMPORTANT SAFETY TIPS

When using electrical appliances, basic safety precautions should be followed to reduce the risk of fire, electric shock, and injury to persons or property. Read all instructions before using any appliance.

- Do not operate this, or any other appliance with a damaged cord. Connect to properly **grounded** outlets only. No other appliance should be plugged into the same outlet. Be sure that the plug is fully inserted into the receptacle.
- Do not run the power cord over carpeting or other heat insulators. Do not cover the cord. Keep cord away from traffic areas, and do not submerge in water.
- We do not recommend the use of an extension cord, as it may overheat and become a risk of fire. If you must use an extension cord, use No.14 AWG minimum size and rated no less than 1875 watts.
- Unplug the ice maker before cleaning or making any repairs or servicing.
- Exercise caution and use reasonable supervision when appliance is used near children.
- Do not use your ice-maker outdoors. Place the ice-maker away from direct sunlight and make sure that there is at least 6 inches of space between the back of your unit and wall. Keep a minimum distance of 6 inches on each side of your unit free.
- Do not use other liquid to make the ice-cube other than water.
- Do not clean your ice maker with flammable fluids. The fumes can create a fire hazard or explosion.
- Do not tip over.
- If the ice maker is brought in from outside in wintertime, give it a few hours to warm up to room temperature before plugging it in.

WARNING: This appliance must be earthed.

IMPORTANT:

The wires in this mains lead are colored in accordance with the following code:

Green or Green with a strip yellow:	Grounding
White:	Neutral
Black:	Live

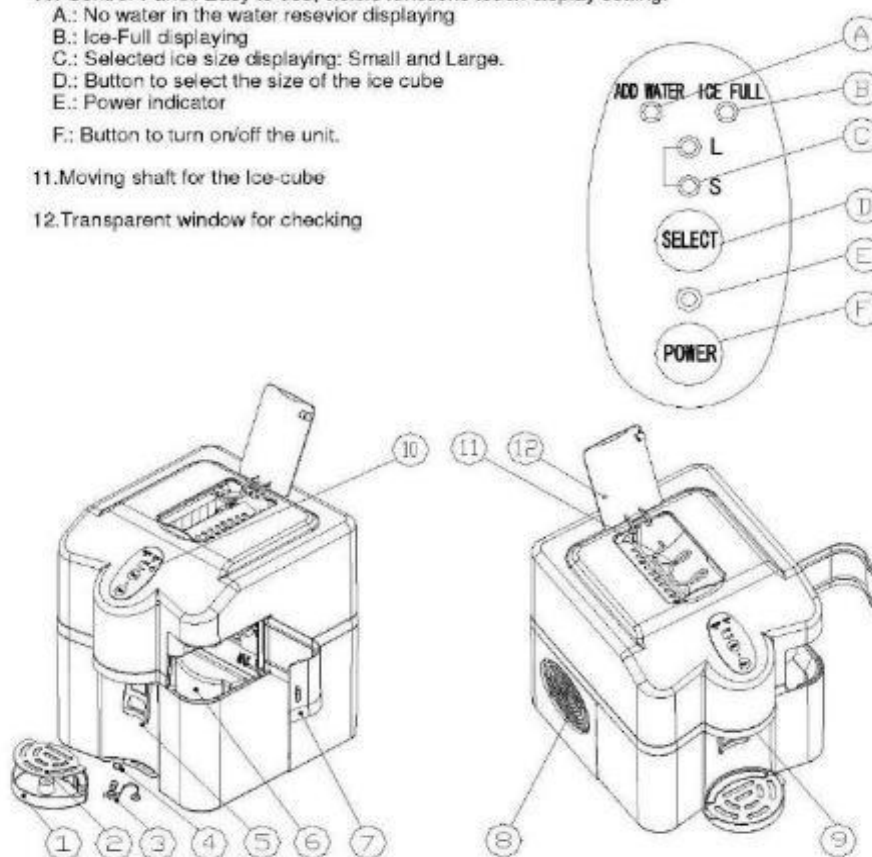
To avoid a hazard due to instability of the appliance, it must be placed at a even or flat surface.

7.0 Illustrations

Illustration No. 2d - (continued)

GETTING TO KNOW YOUR UNIT

1. Water drip tray:
2. Cover of the water drip tray: Also used for the support of the ice-cube container
3. Water drain cap: For draining water from water reservoir,
4. Water drain port
5. Push button for ice-cube
6. Internal water reservoir
7. Access door for filling water into the reservoir
8. Hot Air outlet
9. Ice-cube tap
10. Control Panel: Easy to use, visible functions touch display setting.
 - A.: No water in the water resevior displaying
 - B.: Ice-Full displaying
 - C.: Selected ice size displaying: Small and Large.
 - D.: Button to select the size of the ice cube
 - E.: Power indicator
 - F.: Button to turn on/off the unit.
11. Moving shaft for the Ice-cube
12. Transparent window for checking



7.0 Illustrations

Illustration No. 2e - (continued)

OPERATING PROCEDURES & MAINTENANCE

UNPACKING YOUR ICE MAKER

1. Remove the exterior and interior packaging. Check that accessory is included first. If any parts are missing, please contact our customer service.
2. Remove all the tapes on the unit.
3. Clean the interior (such as water reservoir, moving shaft for Ice-cube etc.) with lukewarm water and a soft cloth.
4. Find a location for your ice maker that is protected from direct sunlight and other sources of heat (i.e.: stove, furnace, radiator). Place the ice maker on a level surface. Make sure that there is at least 6 inches of space between the back and sides of your ice maker and the wall.
5. Allow one hour for the refrigerant fluid to settle before plugging your ice maker in.
6. The appliance must be positioned so that the plug is accessible.

CONNECTING YOUR ICE MAKER



DANGER

*** Improper use of the grounded plug can result in the risk of electrical shock. If the power cord is damaged please call our customer service.**

1. This unit should be properly grounded for your safety. The power cord of this appliance is equipped with a three-prong plug which mates with standard three prong wall outlets to minimize the possibility of electric shock.
2. Plug your appliance into an exclusive, properly installed, grounded wall outlet. Do not under any circumstances, remove the third (ground) prong from the power cord. Any questions concerning power and/or grounding should be directed toward a certified electrician.
3. This appliance requires a standard 115volt, 60Hz electrical outlet with three-prong ground.

CLEANING AND MAINTAINING YOUR ICE MAKER

Before using your ice maker, it is strongly recommended to clean it thoroughly.

1. Unplug the unit before cleaning or any maintenance.
2. Clean the interior with diluted detergent, warm water and a soft cloth. First pour the warm water with diluted detergent into the internal water reservoir and the space below the transparent window (Note: Place a container on the cover of the water drip tray first because the water will flow out from the ice-cube tap), then use the soft cloth to wipe the surface.
3. Again use the water to rinse the inside parts, and drain out the water by unplugging the drain cap on the bottom.
4. The outside of the ice maker should be cleaned regularly with a mild detergent solution and warm water.
5. Dry the interior and exterior with a soft cloth.
6. When the machine is not in use for a long time, open water drain cap to drain out water completely from water reservoir.

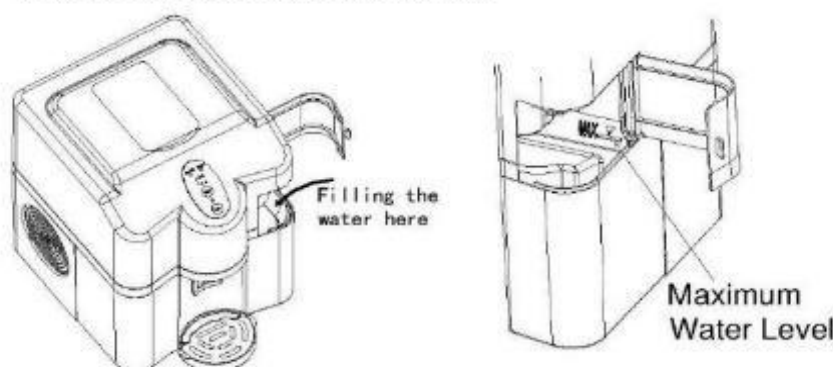
7.0 Illustrations

Illustration No. 2f - (continued)

USING YOUR ICE MAKER

How to start the unit

1. Open the access door for filling water, pour water into water reservoir
Filling with potable water only.
Keep water level **below** the "MAX" water level mark.



2. Press "Power" button on the control panel to begin the ice making cycle.
3. The default size of ice-cube is Large. If you want to select the size of the ice cube again, just press the "Select" button. If the room temperature is lower than 60°F, it is recommended to select the small size in order to avoid ice sticking together.
4. The ice making cycle lasts 6 to 13 minutes, depending on the size of the ice cube selection and the ambient temperature. In the extreme hot room temperature, ice-making time maybe vary a lot.
5. While the icemaker is on, verify water level periodically. If water pump can't inject water, the ice maker will stop automatically, and the "Add Water" indicator will be on.
Press "Power" button, fill water up to the level mark and press "Power" button again to turn on the unit again.
Allow the refrigerant liquid inside the compressor at least 3 minutes to settle before restarting.

When Ice Full indicator is on

6. The ice maker automatically stops working when the ice-cube is full inside and the "Ice Full" indicator will be on.

How to acquire the ice-cube

7. Use your ice-cube container to push forward the push button for ice-cube (No.5 displayed in above diagram), push it always, then the moving shaft for the ice-cube will activate, the ice-cube will fall down into your ice-cube container from the ice-cube tap.

Note: Be sure to close the transparent window on the top of the unit when you want to get

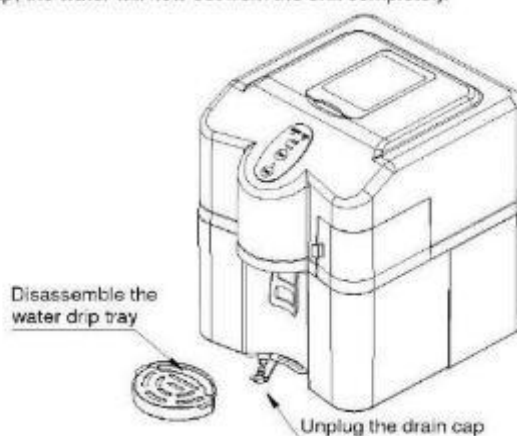
7.0 Illustrations

Illustration No. 2g - (continued)

the ice-cube, otherwise the moving shaft for the ice-cube will not start to work.
The blue light will light on when you push forward the push button, if this blue light is not on, the ice-cube will not fall down.

How to drain out the water inside the unit

8. When you clean the unit or change the drinkable water, need to drain out the left water in the water reservoir, please disassemble the water drip tray first, then unplug the water drain cap, the water will flow out from the unit completely.



9. Change water in the water reservoir every 24 hours to ensure a reasonable hygiene level.
If unit isn't in use, drain all water left in the water reservoir.

7.0 Illustrations

Illustration No. 2h - (continued)

TROUBLESHOOTING		
PROBLEM	POSSIBLE CAUSE	SOLUTION
"Add Water" indicator is on.	Lack of Water.	Stop the ice maker, fill water, and press "Power" button again to restart the unit.
"Ice Full" Indicator is on.	There is too much ice.	Remove ice from ice basket.
Ice cubes stick together.	The ice cycle is too long.	Stop the ice maker, and restart it when the ice blocks melt. Select the small size ice cube selection.
	Water temperature in inner tank is too low.	Change the water in the inner Tank. Temperature of water is better set between 45°F-90°F.
There are ice-cube inside the unit, but can't dispense the ice-cube when you push the button.	The transparent window is opened.	Close the transparent window door.
	Moving shaft for the ice-cube is blocked.	Release the Push button for ice-cube for 3 seconds, then again push the button.
Ice making cycle is normal but no ice is made.	Ambient temperature or water temperature in inner tank is too high.	Please run the ice maker below 90°F and pour colder water into tank.
	Refrigerant liquid leakage.	Verify by a qualified technician.
	Pipe in the cooling system is blocked.	Verify by a qualified technician.

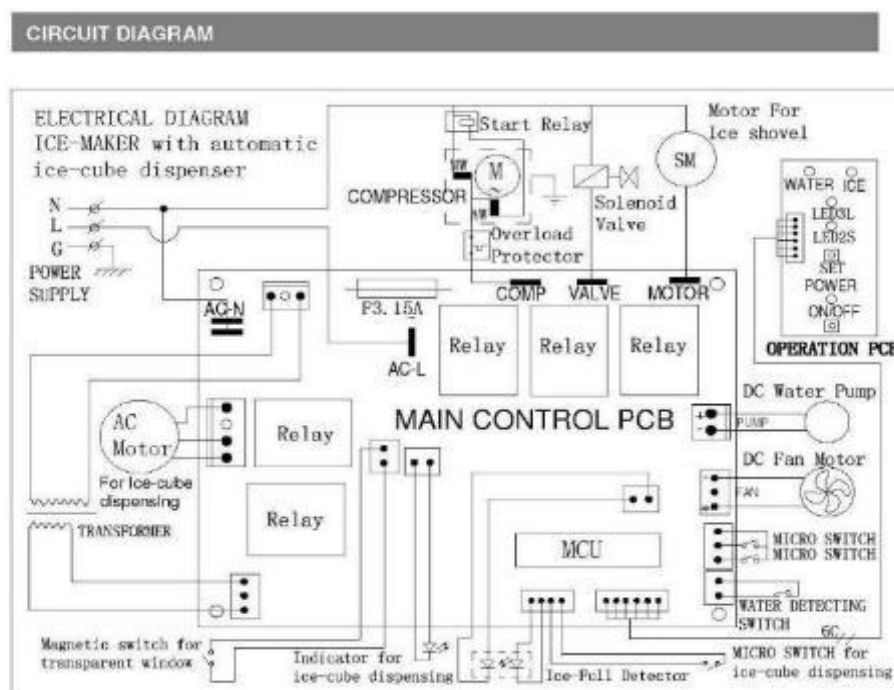
TECHNICAL PARAMETERS & CIRCUIT DIAGRAM

TECHNICAL PARAMETERS

Model	HZB-12D
Protection Type	I
Power	115V/60Hz
Ice Making Current	1.8A
Ice Harvest Current	2.5A
Refrigerant	R134a/67g
Design Pressure	
High Side	290Psig
Low Side	88Psig
Net Weight	11.2Kg
Enclosure	Plastic

7.0 Illustrations

Illustration No. 2i - (continued)



7.0 Illustrations

Illustration No. 3 - Cautionary Marking

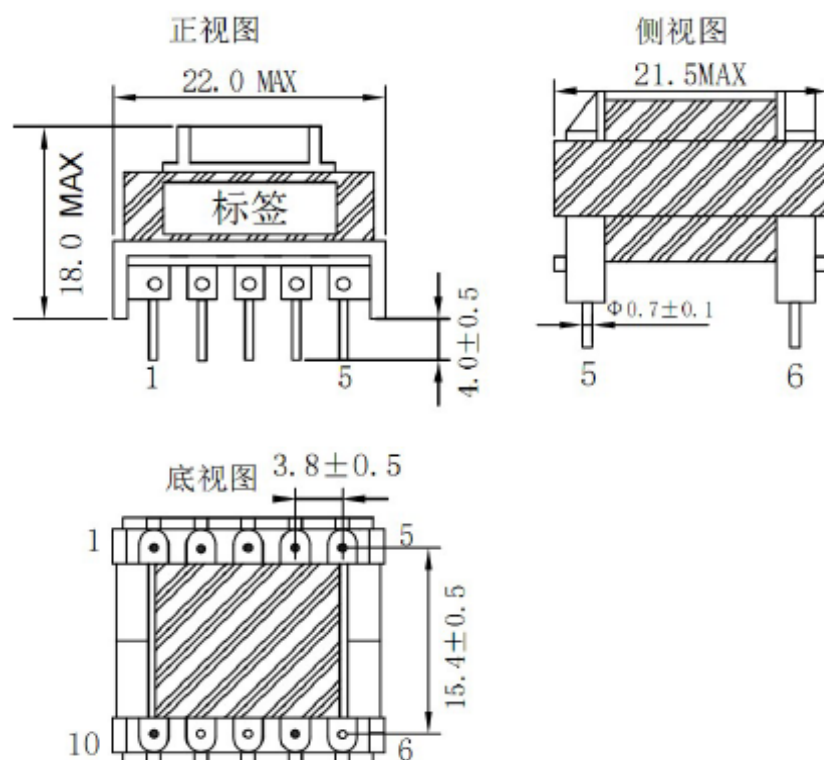
Caution: risk of electric shock, switch in off position
does not de-energize all loads.

Caution: risque de choc electirc, interrupteur en position
OFF ne pas hors tension toutes les charges.

7.0 Illustrations

Illustration No. 4a - Specification for transformer (item 27 in section 4.0)

1. 外形尺寸/MECHANICAL DIMENSION (UNIT:mm)



实物图片



标签内容

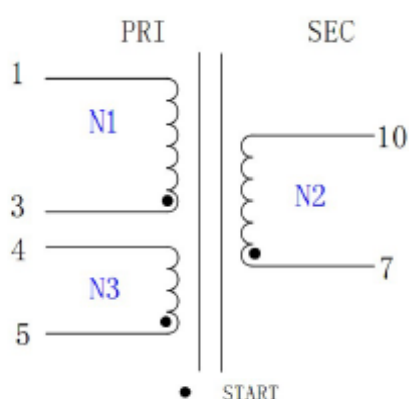
EF20 B

EF20 与 B 之间空 2 格

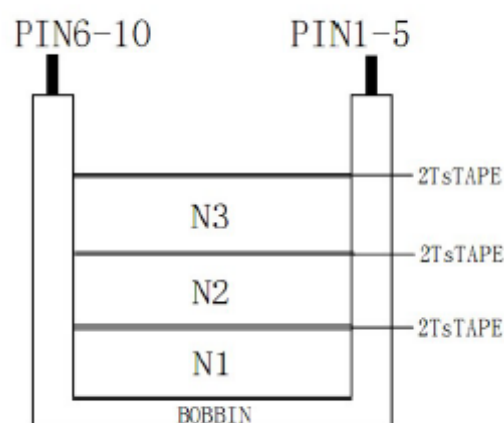
备注:

- 骨架空 PIN6, 8, 9;
- 磁芯开气隙, 气隙磁芯装在 PIN6-10, 组装后用 0.025*5.5mm 蓝色胶带固定 3Ts;
- 产品需真空含浸并烘干;
- 成品 PIN1-5 侧贴标签或喷码, 字脚朝 PIN, 内容如图。

2. SCHEMATIC 电原理图:

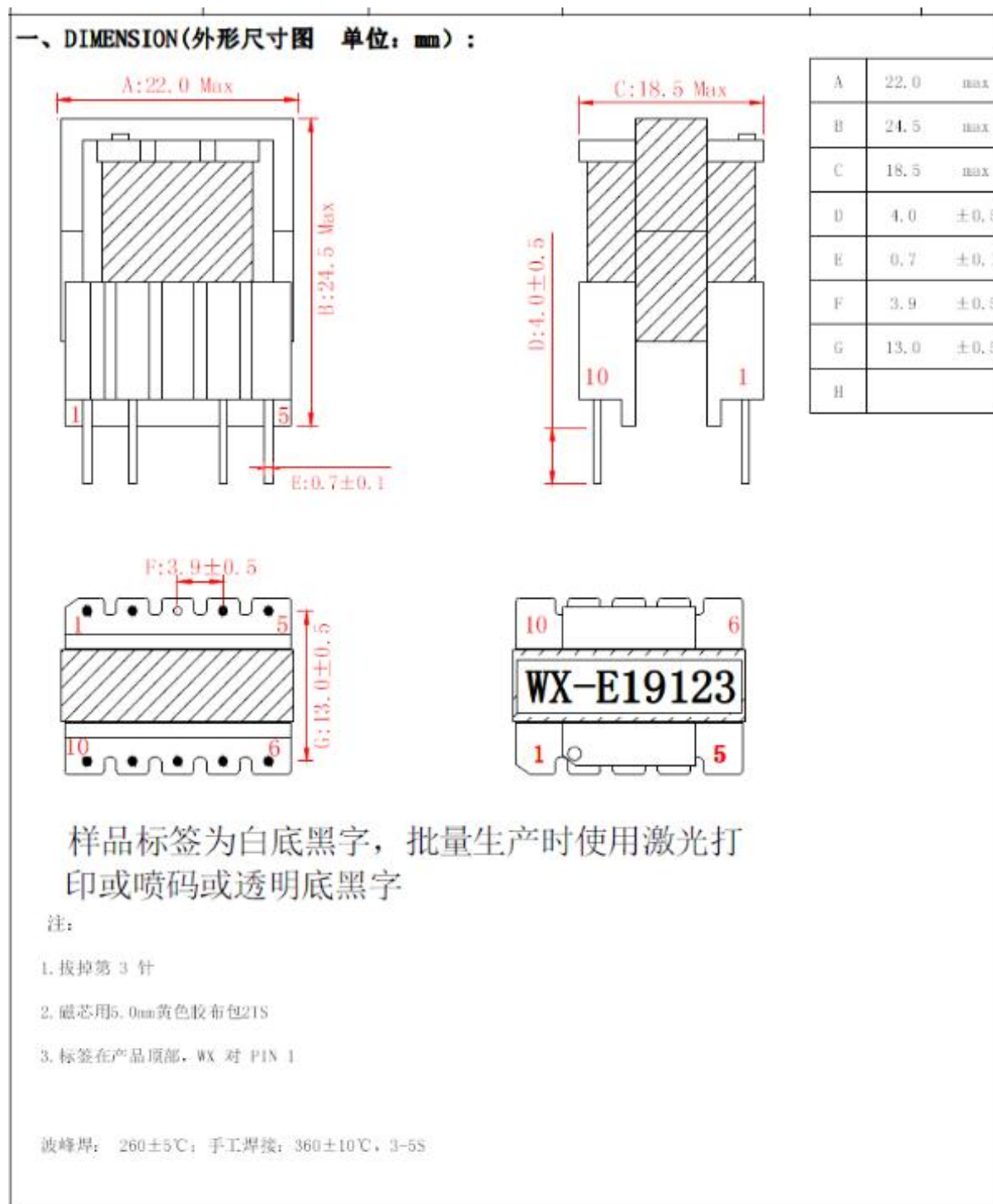


3. WINDING/内部结构图:

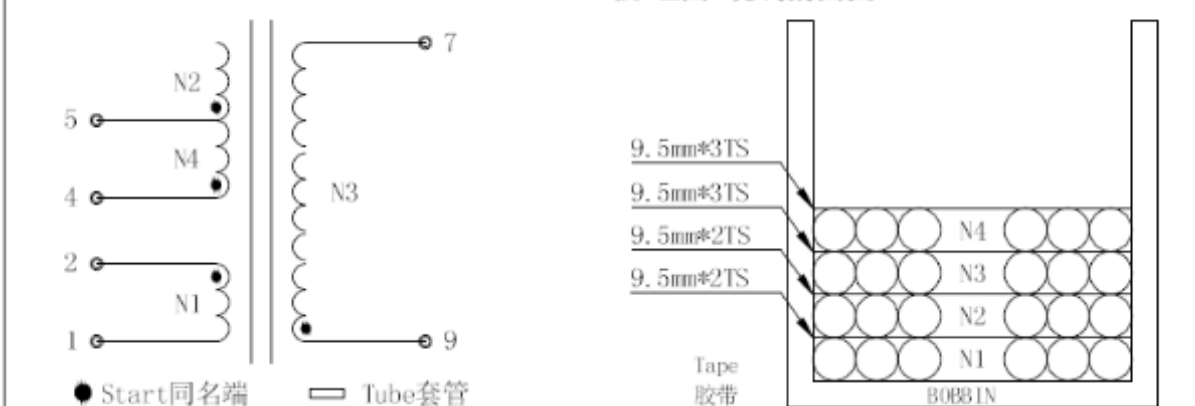


7.0 Illustrations

Illustration No. 4b - Specification for transformer (item 27 in section 4.0)

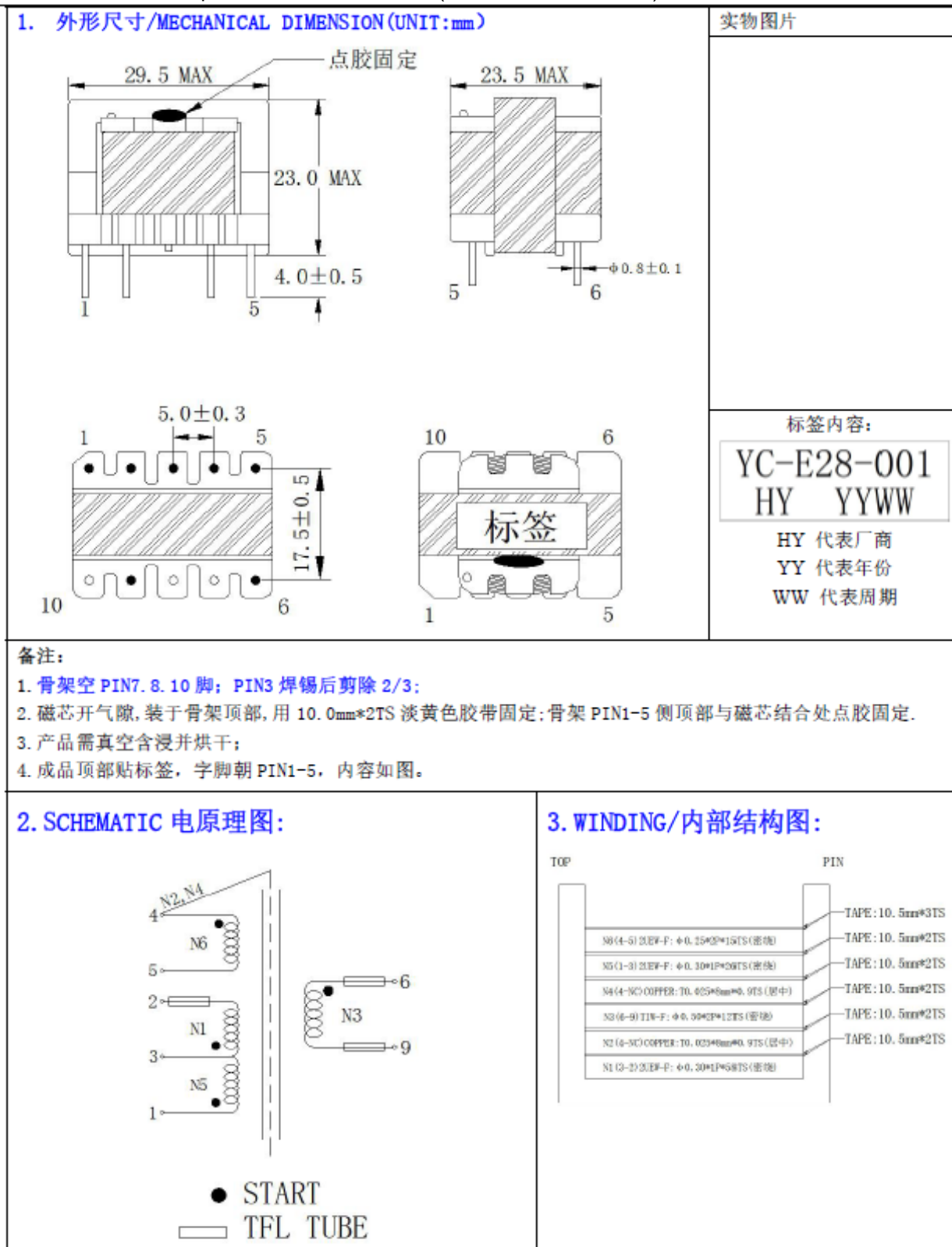


二、SCHEMATIC DIAGRAM & WINDING SECTION (原理图&绕线剖面图) :



7.0 Illustrations

Illustration No. 4c - Specification for transformer (item 27a in section 4.0)

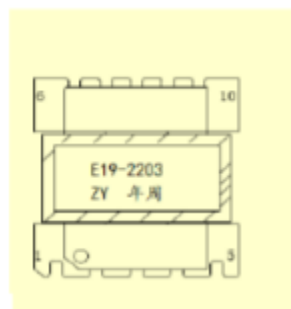
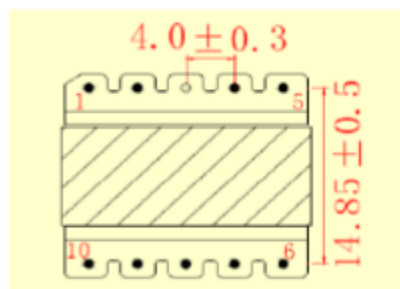
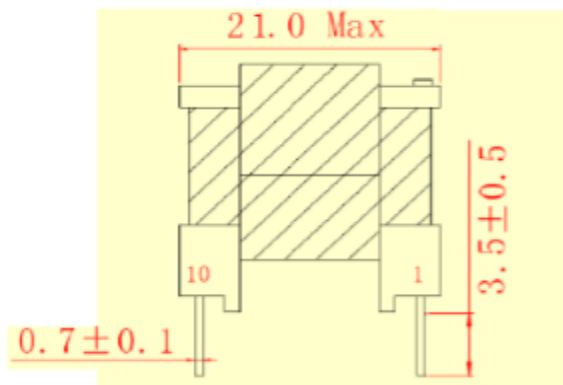
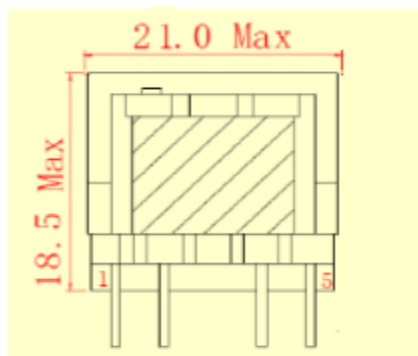


7.0 Illustrations

Illustration No. 4d - Specification for transformer (item 27b in section 4.0)

1、外形尺寸 CONSTRUCTIONS § DIMENSIONS

单位 UNIT: mm



注：1、空 6.8.10 脚，3 脚成品后切除。

2、PIN5 预留引出线 0.25 线接磁芯，磁芯外包三层胶带固定。

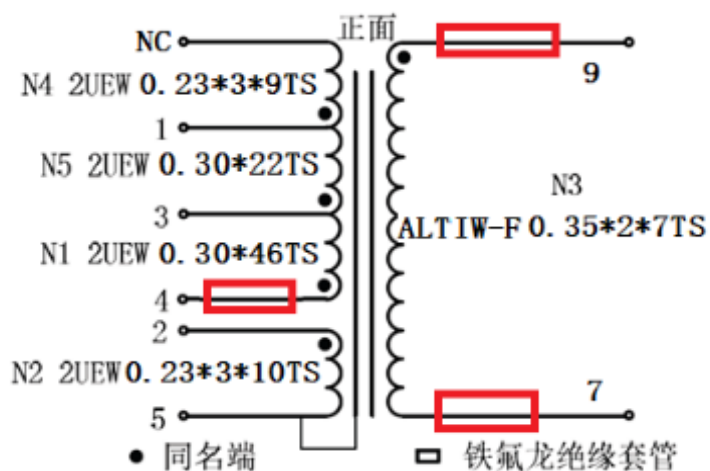
3、标签面向 1-5 脚。

4、产品真空含浸。

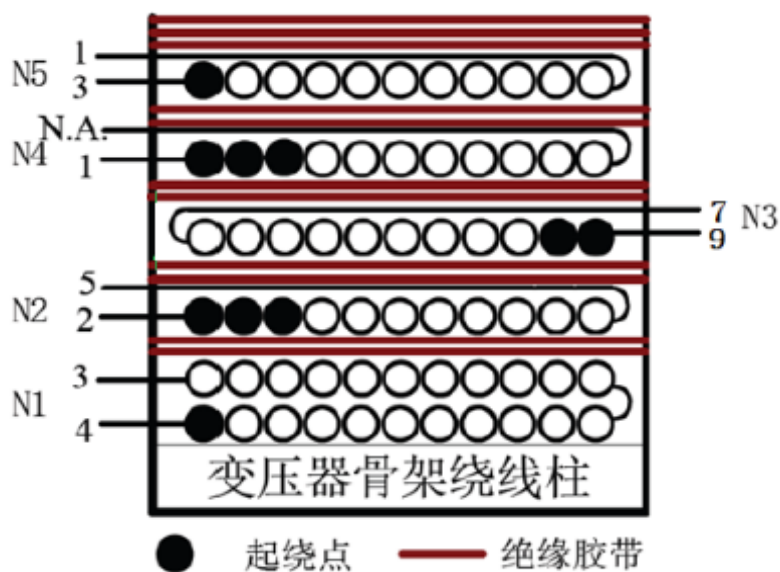
7.0 Illustrations

Illustration No. 4d1 - Specification for transformer (item 27b in section 4.0)

2、电气原理图 SCHEMATIC DIAGRAM

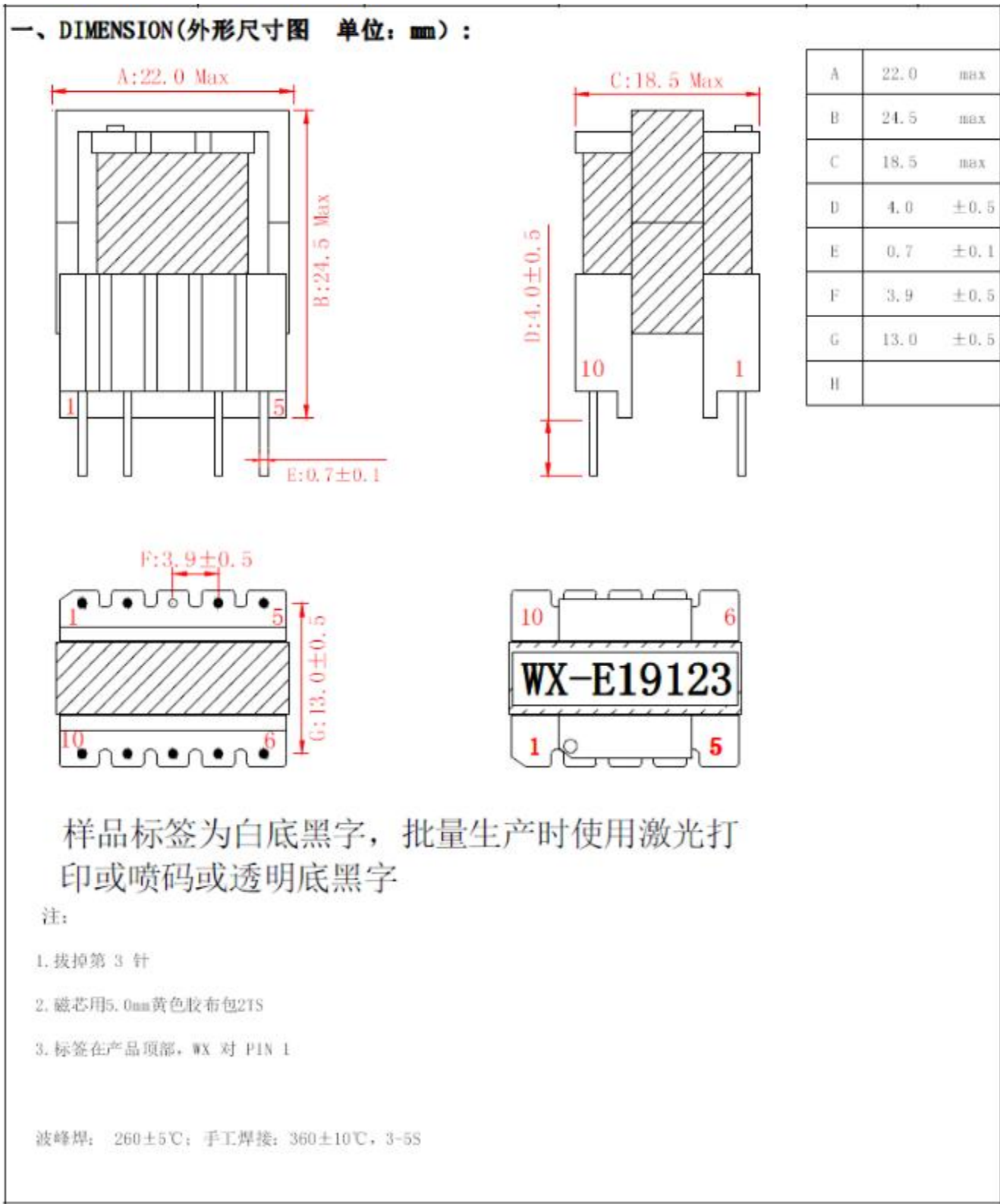


3、绕制结构图 WINDING SPECIFICATION



7.0 Illustrations

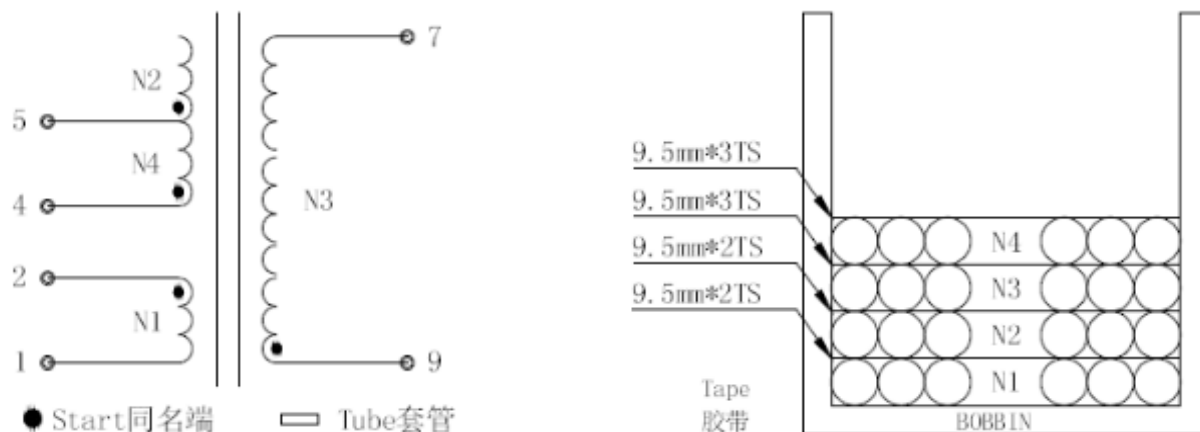
Illustration No. 4e - Specification for transformer (item 4.20 in section 4.0)



7.0 Illustrations

Illustration No. 4e1 - Specification for transformer (item 4.20 in section 4.0)

二、SCHEMATIC DINGRAM & WINDING SECTION(原理图&绕线剖面图)：



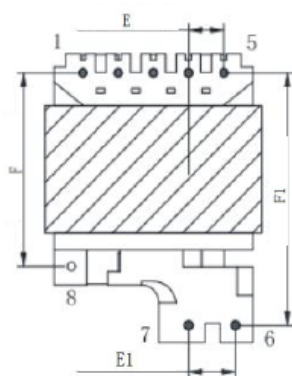
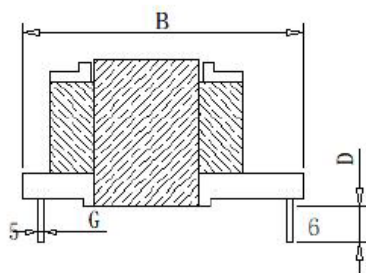
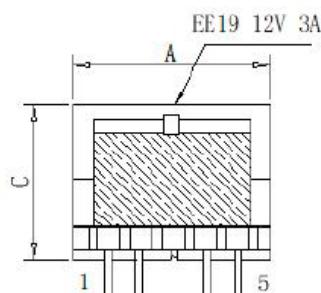
三、WINDING TABLE(绕线结构)：

NO. 序号	S-F 起-收	Wire SPEC. & Shares 线径*股数	Turns 圈数 (TS)	Winding Way 绕线方式	Margin Tape 档墙(TS)		TUBE 套管		TAPE 胶带 (TS)
					PIN	TOP	S	F	
N1	2-1	2UEW $\Phi 0.18*1C$	120	骨架顶部朝机器 逆绕 密绕					2
N2	5--	2UEW $\Phi 0.18*2C$	18REF	骨架顶部朝机器 逆绕 密绕					2
N3	9-7	DRTIW $\Phi 0.45*1C$	15	骨架顶部朝机器 逆绕 密绕					3
N4	4-5	2UEW $\Phi 0.18*1C$	18	骨架顶部朝机器 逆绕 靠PIN端密绕					3

7.0 Illustrations

Illustration No. 4f - Specification for transformer (item 4.20 in section 4.0)

一、外观尺寸图:(单位 :mm)

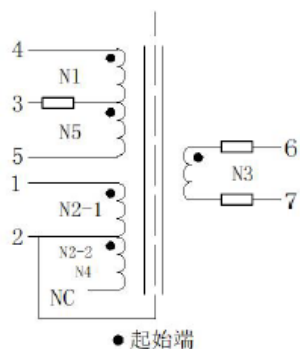


A	20.5MAX
B	25.0 MAX
C	17.2 MAX
D	3.5±0.5
E	3.0±0.3
E1	4.0±0.5
F	16.1±0.5
F1	21.0±0.5
G	Ø0.8±0.1

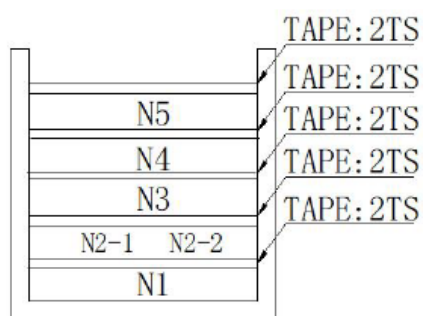
7.0 Illustrations

Illustration No. 4f1 - Specification for transformer (item 4.20 in section 4.0)

二、原理和结构图



三、绕组结构明细



绕组	脚位		套管		挡墙		线径	圈数	绕法	绝缘胶带		绕线方向
	S	F	S	F	TOP	PIN	mm	Ts	密/疏			
N1	4	3		28L*10mm			0.29*1p	52.0	密绕	0.025*9mm*淡黄色	2	TOP 端 朝 机 台 顺 绕
N2-1	1	2					0.15*1p	7.0	同层密绕	0.025*9mm*淡黄色	2	
N2-2	2	NC					0.15*1p	7.0		0.025*9mm*淡黄色	2	
N3	6	7	18L*15mm	18L*15mm			TIW-F 0.75	7.0	密绕	0.025*9mm*淡黄色	2	
N4	2	NC					0.15*2p	17.0	密绕	0.025*9mm*淡黄色	2	
N5	3	5					0.29*1p	23.0	密绕	0.025*9mm*淡黄色	2	

8.0 Test Summary					
Evaluation Period	January 27, 2010 to February 5, 2010		Project No.	SH10011256-001	
Sample Rec. Date	Jan. 27, 2010	Condition	Prototype	Sample ID.	0100127-11-002
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
Test Description		UL 563, Eighth Edition, July 31, 2009			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Starting Test		38			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Overflow Test		42			
Stability Test		43			
Overvoltage and Undervoltage Tests		47			
Insulation Resistance Test		48			
Strength Tests - Pressure Containing Components		51			
Strain Relief Test		52			
Tests on Nonmetallic Materials		55			
Test Description		CAN/CSA C22.2 No. 120-M91, reaffirmed 2004			
		Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Starting		6.13			
Cabinet Strength		6.15			
Physical Abuse (Enclosures)		6.16			
Moisture Absorption Resistance		6.20			
Printed Circuit Boards (Abnormal)		6.21			
Overflow		6.23			
Strain Relief (Supply Cord)		6.24			
Pressure Tests		6.26			
Test Description		UL 5085-1 and 5085-3, First Edition, rev. June 1, 2007			
		Clause			
Open Circuit Secondary Voltage Test		27			
Output Current and Power Test		28			
Dielectric Voltage-Withstand Test		32			

8.0 Test Summary

Evaluation Period	9-Jan-13	Project No.	SH13010219
Sample Rec. Date	9-Jan-13	Condition	Production
Sample ID.	N/A		
Test Location	Ningbo New Hicon Electrical Appliance Co., Ltd.		
Test Procedure	Testing at Manufacturers Premise		

Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.

Due to alternative condenser fan motor is added, below tests are considered need to preform:

Test Description	UL 563, Eighth Edition, rev. July 31, 2009 Clause	CAN/CSA C22.2 No. 120-M91, reaffirmed 2004 Clause
Input Test	36	6.3
Temperature and Pressure Test	37	6.4, 6.7
Dielectric Voltage-Withstand Test	39	6.10

Evaluation Period	14-May-14	Project No.	140500302SHA
Sample Rec. Date	6-May-14	Condition	Production
Sample ID.	0140506-14		
Test Location	Intertek Testing Services Shanghai Limited		
Test Procedure	Testing lab		

Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.

Due to applicable standards are updated and SMPS is introduced, below tests are evaluated need to preform, the appliance is considered to conform with the standard of UL 563, Eighth Edition, rev. November 29, 2013 and CSA C22.2 No. 120, dated March 2013:

Test Description	CSA C22.2 No. 120, dated March 2013 Clause
Stability test	6.29
Spill test	6.30
Test Description	UL 1310, 6th Edition, rev. October 30, 2013 Clause
Maximum Output Voltage Test	28
Output Current and Power Test	30
Dielectric Voltage Withstand Test	34
Output loading	39.2
Transformer burnout	39.3
Component breakdown	39.6
Tests on Insulating Materials	40
Test Description	CSA C22.2 No. 223-M91, updated No. 2, Sep-2009 Clause
Rating	6.2
Dielectric Strength	6.4
Secondary Circuit Protection	6.6
Abnormal	6.7
Insulating Materials	6.13

8.0 Test Summary					
Evaluation Period	4/13/2016 to 4/22/2016		Project No.	160401307SHA	
Sample Rec. Date	13-Apr-16	Condition	Production	Sample ID.	0160413-18
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to adding new model HZB-12E, HZB-12EH, the following items are considered need to perform:					
Test Description		UL 563, Eighth Edition, rev. Nov. 29, 2013			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Starting Test		38			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Overflow Test		42			
Stability Test		43			
Overvoltage and Undervoltage Tests		47			
Strength Tests - Pressure Containing Components		51			
Strain Relief Test		52			
Burnout Test - Impedance Protected Motors		54			
Test Description		CSA C22.2 No. 120, dated March 2013			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Starting		6.13			
Physical Abuse (Enclosures)		6.16			
Moisture Absorption Resistance		6.20			
Printed Circuit Boards (Abnormal)		6.21			
Overflow		6.23			
Strain Relief (Supply Cord)		6.24			
Pressure Test		6.26			
Stability Test		6.29			
Spill Test		6.30			

8.0 Test Summary					
Evaluation Period	2019-10-18 to 2019-10-29		Project No.	191002684SHA	
Sample Rec. Date	17-Oct-19	Condition	Production	Sample ID.	0191017-32
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to adding new model HZB-30D, the following items are considered to be performed:					
Test Description		UL 563:2009 Ed.8+R:29Nov2013			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Starting Test		38			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Overflow Test		42			
Stability Test		43			
Overvoltage and Undervoltage Tests		47			
Strength Tests - Pressure Containing Components		51			
Strain Relief Test		52			
Burnout Test - Impedance Protected Motors		54			
Leakage Test		SA5.1			
Temperature Test		SA5.3			
		CSA C22.2#120 Issued: 2013/03/01			
Test Description		Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Starting		6.13			
Physical Abuse (Enclosures)		6.16			
Moisture Absorption Resistance		6.20			
Printed Circuit Boards (Abnormal)		6.21			
Overflow		6.23			
Strain Relief (Supply Cord)		6.24			
Pressure Test		6.26			
Stability Test		6.29			
Spill Test		6.30			
Leakage Test		E.5.1			
Temperature Test		E.5.3			

8.0 Test Summary					
Evaluation Period	2020-07-08 to 2020-08-03		Project No.	200702841SHA	
Sample Rec. Date	7-Jul-20	Condition	Production	Sample ID.	0200707-23
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to adding new model HZB-20N and new compressor on HZB-12E & HZB-12EH, the following items are considered to be performed:					
Test Description		UL 563:2009 Ed.8+R:30Aug2018			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Starting Test		38			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Overflow Test		42			
Stability Test		43			
Overvoltage and Undervoltage Tests		47			
Strength Tests - Pressure Containing Components		51			
Strain Relief Test		52			
Leakage Test		SA5.1			
Temperature Test		SA5.3			
		(R2018) [CSA C22.2#120:2013 Ed.4]			
Test Description		Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Starting		6.13			
Physical Abuse (Enclosures)		6.16			
Moisture Absorption Resistance		6.20			
Printed Circuit Boards (Abnormal)		6.21			
Overflow		6.23			
Strain Relief (Supply Cord)		6.24			
Pressure Test		6.26			
Stability Test		6.29			
Spill Test		6.30			
Leakage Test		E.5.1			
Temperature Test		E.5.3			
Test Description		UL 1004-1:2012 Ed.2+R:07Aug2018 Clause	UL 1004-3:2015 Ed.2+R:31Jan2018 Clause	CSA C22.2#77:2014 Ed.8+E1 Clause	
Dielectric Voltage-Withstand Test		37	/	6.5	
Locked Rotor Temperature Test		/	8	6.4	
Locked Rotor Endurance Test		/	9	6.6	

8.0 Test Summary					
Evaluation Period	2021-11-18 to 2021-11-30		Project No.	211102628SHA	
Sample Rec. Date	12-Nov-21	Condition	Prototype	Sample ID.	0211112-25
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to adding new models HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN and new compressor on HZB-12E & HZB-12EH, the following items are considered to be performed:					
Test Description		UL 563:2009 Ed.8+R:30Aug2018			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Starting Test		38			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Overflow Test		42			
Stability Test		43			
Overvoltage and Undervoltage Tests		47			
Strength Tests - Pressure Containing Components		51			
Strain Relief Test		52			
Leakage Test		SA5.1			
Temperature Test		SA5.3			
		(R2018) [CSA C22.2#120:2013 Ed.4]			
Test Description		Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Starting		6.13			
Physical Abuse (Enclosures)		6.16			
Moisture Absorption Resistance		6.20			
Printed Circuit Boards (Abnormal)		6.21			
Overflow		6.23			
Strain Relief (Supply Cord)		6.24			
Pressure Test		6.26			
Stability Test		6.29			
Spill Test		6.30			
Leakage Test		E.5.1			
Temperature Test		E.5.3			
Test Description		UL 1310:2018 Ed.7+R:16Aug2019		CSA C22.2#223:2015 Ed.3	
		Clause		Clause	
Maximum Output Voltage Test		28		6.2.1	
Output Current and Power Test		30		6.2.4	
Dielectric Voltage Withstand Test		34		6.4	
Transformer burnout		39.4		-	
Component Breakdown		39.7		6.7	
Tests on Insulation Materials		40		6.13	

8.0 Test Summary			
Evaluation Period	2022-11-11 to 2022-11-30		Project No. 221101431SHA
Sample Rec. Date	10-Nov-22	Condition Prototype	Sample ID. 0221110-25
Test Location	Intertek Testing Services Shanghai Limited		
Test Procedure	Testing lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
the following items were performed on model HZB-15NA, HZB-20DN:			
Test Description	UL 563:2009 Ed.8+R:26May2021 Clause		
Leakage Current Test - Cord Connected Ice Makers	33		
Input Test	36		
Temperature and Pressure Test	37		
Starting Test	38		
Dielectric Voltage-Withstand Test	39		
Condenser Fan Motor Failure Test	40		
Stability Test	43		
Strain Relief Test	52		
Leakage Test	SA5.1		
Temperature Test	SA5.3		
Test Description	(R2018) [CSA C22.2#120:2013 Ed.4] Clause		
Rating	6.3		
Temperature (Normal Load)	6.4		
Leakage Current	6.9		
Dielectric Strength	6.10		
Temperature (Abnormal Operation)	6.11		
Starting	6.13		
Moisture Absorption Resistance	6.20		
Strain Relief (Supply Cord)	6.24		
Pressure Test	6.26		
Stability Test	6.29		
Leakage Test	E.5.1		
Temperature Test	E.5.3		
Test Description	UL 1310:2018 Ed.7+R:09Jun2022	CSA C22.2#223:2015 Ed.3	
Maximum Output Voltage Test	28	6.2.1	
Output Current and Power Test	30	6.2.4	
Dielectric Voltage Withstand Test	34	6.4	
Transformer burnout	39.4	-	
Component Breakdown	39.7	6.7	
Tests on Insulation Materials	40	6.13	
Test Description	UL 1004-1:2012 Ed.2+R:05Nov2020 20 Clause	UL 1004-3:2015 Ed.2+R:31Jan2018 Clause	CSA C22.2#77:2014 Ed.8+E1 Clause
Dielectric Voltage-Withstand Test	37	/	6.5
Locked Rotor Temperature Test	/	8	6.4
Locked Rotor Endurance Test	/	9	6.6

8.0 Test Summary					
Evaluation Period	2023-04-12 to 2023-04-24		Project No.	230400664SHA	
Sample Rec. Date	10-Apr-23	Condition	Prototype	Sample ID.	0230410-35
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
the following items were performed on model HZB-15N with new compressor M43C5L:					
Test Description		UL 563:2009 Ed.8+R:26May2021 Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Leakage Test		SA5.1			
Temperature Test		SA5.3			
Test Description		(R2018) [CSA C22.2#120:2013 Ed.4] Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Leakage Test		E.5.1			
Temperature Test		E.5.3			

8.0 Test Summary					
Evaluation Period	2023-09-11 to 2023-09-25		Project No.	2309A0354SHA	
Sample Rec. Date	8-Sep-23	Condition	Prototype	Sample ID.	0230908-25
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
the following items were performed on model HZB-15N and HZB-20BN with new compressor UKN43YA:					
Test Description	UL 563:2009 Ed.8+R:26May2021 Clause				
Leakage Current Test - Cord Connected Ice Makers	33				
Input Test	36				
Temperature and Pressure Test	37				
Dielectric Voltage-Withstand Test	39				
Condenser Fan Motor Failure Test	40				
Test Description	(R2018) [CSA C22.2#120:2013 Ed.4] Clause				
Rating	6.3				
Temperature (Normal Load)	6.4				
Leakage Current	6.9				
Dielectric Strength	6.10				
Temperature (Abnormal Operation)	6.11				
Test Description	UL 1004-1:2012 Ed.2+R:05Nov20 20 Clause	UL 1004-3:2015 Ed.2+R:12Jan2023 Clause	CSA C22.2#77:2014 Ed.8+E1 Clause		
Dielectric Voltage-Withstand Test	37	/	6.5		
Locked Rotor Temperature Test	/	8	6.4		
Locked Rotor Endurance Test	/	9	6.6		

8.0 Test Summary					
Evaluation Period	2023-12-26 to 2024-01-15		Project No.	2312A0814SHA	
Sample Rec. Date	25-Dec-23	Condition	Prototype	Sample ID.	0231225-43
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
New models HZB-15EN, HZB-20EN, HZB-15EN-W, HZB-15N-W, HZB-15N/S-W, HZB-15NA-W, HZB-15NA/S-W, HZB-15NB-W, HZB-15NB/S-W, HZB-20EN-W and alternative control panel and wifi module were added in this revision, the following items were performed on model HZB-15EN and HZB-20EN:					
Test Description		UL 563:2009 Ed.8+R:26May2021 Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Dielectric Voltage-Withstand Test		39			
Condenser Fan Motor Failure Test		40			
Test Description		(R2018) [CSA C22.2#120:2013 Ed.4] Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
Temperature (Abnormal Operation)		6.11			
Test Description		UL 1004-1:2012 Ed.2+R:05Nov2020 Clause	UL 1004-3:2015 Ed.2+R:12Jan2023 Clause	CSA C22.2#77:2014 Ed.8+E1 Clause	
Dielectric Voltage-Withstand Test		37	/	6.5	
Locked Rotor Temperature Test		/	8	6.4	
Locked Rotor Endurance Test		/	9	6.6	

8.0 Test Summary					
Evaluation Period	2024-08-12 to 2024-08-30		Project No.	2409B0154SHA	
Sample Rec. Date	9-Aug-24	Condition	Prototype	Sample ID.	A240809-35
Test Location	Intertek Testing Services (Shanghai FTZ) Co., Ltd.				
Test Procedure	Testing lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Test Description		UL 563:2009 Ed.8+R:26May2021			
		Clause			
Leakage Current Test - Cord Connected Ice Makers		33			
Input Test		36			
Temperature and Pressure Test		37			
Dielectric Voltage-Withstand Test		39			
		(R2018) [CSA C22.2#120:2013 Ed.4]			
Test Description		Clause			
Rating		6.3			
Temperature (Normal Load)		6.4			
Leakage Current		6.9			
Dielectric Strength		6.10			
		UL 1004-1:2012 Ed.2+R:05Nov2020	UL 1004-3:2015 Ed.2+R:12Jan2023	CSA C22.2#77:2014 Ed.8+E1	
Test Description		Clause	Clause	Clause	
Dielectric Voltage-Withstand Test		37	/	6.5	
Locked Rotor Temperature Test		/	8	6.4	
Locked Rotor Endurance Test		/	9	6.6	

Evaluation Period	2025-05-12 to 2025-05-30		Project No.	2505B1488SHA	
Sample Rec. Date	6-May-2025	Condition	Prototype	Sample ID.	A250506-19
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, P. R. China				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed on HZBY-12:					
Test Description	UL 60335-2-24:2022 Ed.3+R:29Feb2024& UL 60335-1:2016 Ed.6& CSA C22.2#60335-2-24:2022 Ed.3+U1& CSA C22.2#60335-1:2016 Ed.2 Clause				
Power input and current	10				
Heating	11				
Leakage current and electric strength at operating temperature	13				
Moisture resistance	15				
Leakage current and electric strength	16				
Abnormal operation	19				
Test Description	UL 1004-1:2012 Ed.2+R:05Nov2020 Clause	UL 1004-2:2014 Ed.2+R:09May2024 Clause	CSA C22.2#77:2014 Ed.8+E1 Clause		
Dielectric Voltage-Withstand Test	37	/	6.5		
Locked Rotor Temperature Test	/	3	6.4		
Locked Rotor Endurance Test	/	4	6.6		

8.0 Test Summary

Evaluation Period	2025-09-08 to 2025-09-22		Project No.	2509B0450SHA
Sample Rec. Date	7-Sep-2025	Condition	Prototype	Sample ID.
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, P. R. China			
Test Procedure	Testing Lab			

Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.

Due to previous tests performed in this report, below tests were performed on HZB-15DN, HZB-15NG, HZB-20DN for following change:

Add ten new models, new models HZB-15NH, HZB-15NH/S, HZB-15NG, HZB-15NG/S, HZB-15NG-W, HZB-15NG/S-W, HZB-15NH-W, HZB-15NH/S-W, HZB-15DN-W are extended from model HZB-15N, except that the overall dimensions and evaporator is smaller, the difference between HZB-15NH and HZB-15NG is the enclosure. Models with "/S" have a stainless steel enclosure and models without "/S" have a plastic enclosure. Models follow by suffix "-W" means the unit add wifi module.

Model HZB-15DN share similar cooling system with HZB-15N but different construction.

Add an alternative compressor QD32R11 for HZB-20DN.

Test Description	UL 60335-2-24:2022 Ed.3+R:29Feb2024& UL 60335-1:2016 Ed.6& CSA C22.2#60335-2-24:2022 Ed.3+U1& CSA C22.2#60335-1:2016 Ed.2
	Clause
Protection against access to live parts	8
Power input and current	10
Heating	11
Leakage current and electric strength at operating temperature	13
Moisture resistance	15
Leakage current and electric strength	16
Abnormal operation	19
Stability and mechanical hazards	20
Mechanical strength	21
Construction	22
Internal wiring	23
Components	24
Supply connection and external flexible cords	25
Terminals for external conductors	26
Provision of earthing	27
Creepage distance, clearances and distances through	29
Resistance to heat and fire	30
Proof tracking test	Annex N

8.0 Test Summary

Evaluation Period	2025-12-08 to 2025-12-19		Project No.	2512B0277SHA
Sample Rec. Date	7-Dec-2025	Condition	Prototype	Sample ID: A251207-44
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, P. R. China			
Test Procedure	Testing Lab			

Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.

Due to previous tests performed in this report, below tests were performed on HZB-20EN, HZB-20FN for following change:

1. Add a new model HZB-20FN, which is extended from HZB-20EN except for different appearance and the location of water container.
2. Add an optional construction with DC ice pushing motor, which is already used in HZB-15DN, for HZB-20*N series (*=blank or letter A, B, C, D, E, F) models.
3. Add an alternative main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN and HZB-20*N series (*=blank or letter A, B, C, D, E, F) models, which only one connector on the secondary output side is different compared with the previous one.
4. Add an alternative relay GK32F-12VDC-D-S-A, add five alternative self-priming water pumps.

Test Description	UL 60335-2-24:2022 Ed.3+R:29Feb2024& UL 60335-1:2016 Ed.6& CSA C22.2#60335-2-24:2022 Ed.3+U1& CSA C22.2#60335-1:2016 Ed.2
	Clause
Protection against access to live parts	8
Power input and current	10
Heating	11
Leakage current and electric strength at operating temperature	13
Moisture resistance	15
Leakage current and electric strength	16
Abnormal operation	19
Construction	22
Components	24
Provision of earthing	27
Creepage distance, clearances and distances through	29
Resistance to heat and fire	30

8.1 Signatures

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.

Completed by:	Rancho Ke	Reviewed by:	Kent Zhang
Title:	Project Engineer	Title:	Mandated Reviewer
Signature:	<i>Signature on file</i>	Signature:	<i>Signature on file</i>

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	Ningbo Hicon Industry Technology Co., Ltd.
Address	No.55, 4th Binhai Road, Qianwan New Area, Ningbo, Zhejiang Province
Country	P. R. China
Product	Ice Maker

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 6	WHYNTER LLC
Address	12406 BELL RANCH DRIVE, SANTA FE SPRINGS, CA 90670
Country	USA
Brand Name	Whynter
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 6 MODELS	BASIC LISTEE MODELS
IDC-221SC	HZB-12EH

9.0 Correlation Page For Multiple Listings

MULTIPLE LISTEE 7	Curtis International Ltd.	
Address	7045 BECKETT DRIVE, UNIT 15 MISSISSAUGA, ONTARIO L5S 2A3	
Country	Canada	
Brand Name	IGLOO, FRIGIDAIRE, FRIGIDAIRE GALLERY	
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0	
Address		
Country		
MULTIPLE LISTEE 7 MODELS		BASIC LISTEE MODELS
ICE227- EFIC227- or EFIC227- followed by up to fifteen letters		
EFIC235- or EFIC237- followed by up to fifteen letters		
EFIC255- followed by up to fifteen letters, EFIC256-BLACK, EFIC256-NAVY, EFIC256-GREY, EFIC256-followed by up to fifteen letters, EFIC165-BLACK, EFIC165-followed by up to fifteen letters, EFIC202-BLACK, EFIC202-WHITE, EFIC202-followed by up to fifteen letters, FGIC202-BLACK, FGIC202-WHITE, FGIC202-TEAL, FGIC202-followed by up to fifteen letters, EFIC255-WHITE-CC, EFIC255-GREY_MX		HZB-12E
HBIC3070 or HBIC3070-followed by up to fifteen letters		HZB-20N
EFIC239 or EFIC239-followed by up to fifteen letters		HZB-20CN
EFIC228-SS, EFIC228-SSBLACK, EFIC228-SS followed by up to fifteen letters, EFIC228_AMZ, EFIC228-followed by up to fifteen letters, EFIC2400, EFIC2400-followed by up to fifteen letters, EFIC239-B-SSBLACK_AMZ		HZB-20N
		HZB-20BN
		HZB-15NB
EFIC254-SSBLACK, EFIC254-SS, EFIC254-SS followed by up to fifteen letters, EFIC241-SSBLACK, EFIC241-SS, EFIC241-SS followed by up to fifteen letters, EFIC214-BLACK, EFIC214-GREY, EFIC214-RED, EFIC214-SSfollowed by up to fifteen letters		HZB-15N/S
		HZB-15N
EFIC254-followed by up to fifteen letters, EFIC1866-BLACK, EFIC1866-followed by up to fifteen letters		HZB-15EN
		HZB-15NA
EFIC220-BLACK-6COM, EFIC220-GREY-6COM, EFIC220-NAVY-6COM, EFIC220-followed by up to fifteen letters, EFIC201-BLACK, EFIC201-followed by up to fifteen letters		HZB-15NB/S
		HZB-15NG/S
EFIC226-BLACK, EFIC226-WHITE, EFIC226-followed by up to fifteen letters, EFIC226-RED		HZB-15DN
EFIC2550, EFIC2550-followed by up to fifteen letters, FGIC4400-SS, FGIC4400-followed by up to fifteen letters		HZB-15NH/S
		HZBY-12
EFIC144-SS, EFIC144-SSBLACK, EFIC144-SSRED, EFIC144-followed by up to fifteen letters		HZB-20FN
EFIC232-BLACK, EFIC232-WHITE, EFIC232-followed by up to fifteen letters		
EFIC2406-SS, EFIC2406-SSBLACK, EFIC2406-SSRED, EFIC2406-followed by up to fifteen letters		
EFIC247-BLACK, EFIC247-followed by up to fifteen letters		
FGIC3200-ONYX, FGIC3200-followed by up to fifteen letters		

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 10	GOPLUS CORP
Address	11250 poplar Ave, Fontana. Ca92337
Country	USA
Brand Name	COSTWAY
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 10 MODELS	BASIC LISTEE MODELS
EP24509US	HZB-12E
FP10023US	HZB-20N

9.0 Correlation Page For Multiple Listings

MULTIPLE LISTEE 13	SeaLoon International Group (HongKong) Limited
Address	UNIT 2601-05 26/F DELTA HOUSE NO 3 ON YIU STREET SHATIN NT, Hong Kong 999077
Country	P.R.China
Brand Name	Silonn
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 13 MODELS	BASIC LISTEE MODELS
SLIM08, SLIM08C, SLIM08B, SLIM08S, SLIM08R, SLIM08G1, SLIM08S1, SLIM08B1, SLIM08G, SLIM08W, SLIM08G2 SLIM17C, SLIM17B, SLIM17S, SLIM17R, SLIM17G1, SLIM17, SLIM17B1, SLIM17G, SLIM17W, SLIM17G2, SLIM17S1, SLIM24C, SLIM24B, SLIM24S, SLIM24R, SLIM24G1, SLIM24BU, SLIM24G, SLIM24W, SLIM24G2, SLIM24S1, SLIM17C-BD, SLIM17B-BD, SLIM17S-BD, SLIM17R-BD, SLIM17G1-BD, SLIM17-BD, SLIM17B1-BD, SLIM17G-BD, SLIM17W-BD, SLIM17G2-BD, SLIM17S1-BD, SLIM24C-BD, SLIM24B-BD, SLIM24S-BD, SLIM24R-BD, SLIM24G1-BD, SLIM24BU-BD, SLIM24G-BD, SLIM24W-BD, SLIM24G2-BD, SLIM24S1-BD, SLIM24C-WF, SLIM24B-WF, SLIM24S-WF, SLIM24R-WF, SLIM24G1-WF, SLIM24BU-WF, SLIM24G-WF, SLIM24W-WF, SLIM24G2-WF, SLIM24S1-WF SLIM17T, SLIM17TC, SLIM17TB, SLIM17TS, SLIM17TR, SLIM17TG1, SLIM17TS1, SLIM17TB1, SLIM17TG, SLIM17TW, SLIM17TG2, SLIM24, SLIM24TC, SLIM24TB, SLIM24TS, SLIM24TR, SLIM24TG1, SLIM24TS1, SLIM24TBU, SLIM24TG, SLIM24TW, SLIM24TG2, SLIM17T-BD, SLIM17TC-BD, SLIM17TB-BD, SLIM17TS-BD, SLIM17TR-BD, SLIM17TG1-BD, SLIM17TS1-BD, SLIM17TB1-BD, SLIM17TG-BD, SLIM17TW-BD, SLIM17TG2-BD, SLIM24-BD, SLIM24TC-BD, SLIM24TB-BD, SLIM24TS-BD, SLIM24TR-BD, SLIM24TG1-BD, SLIM24TS1-BD, SLIM24TBU-BD, SLIM24TG-BD, SLIM24TW-BD, SLIM24TG2-BD, SLIM24-WF, SLIM24TC-WF, SLIM24TB-WF, SLIM24TS-WF, SLIM24TR-WF, SLIM24TG1-WF, SLIM24TS1-WF, SLIM24TBU-WF, SLIM24TG-WF, SLIM24TW-WF, SLIM24TG2-WF SLIM32, SLIM32T, SLIM32TB, SLIM32-WF, SLIM32T-WF, SLIM32TB-WF, SLIM32-BD, SLIM32T-BD, SLIM32TB-BD SLIM36, SLIM36B, SLIM36-BD, SLIM36B-BD SLIM36T, SLIM36TB, SLIM36T-BD, SLIM36TB-BD	HZB-20BN HZB-15N HZB-15N/S HZB-20EN HZB-15NB HZB-15NB/S

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 19	Shenzhen Junge Yunchuang Technology Co., Ltd.
Address	1204, Unit 3, Building C, Fu Gui Yuan, Fu Gui Road, Fu Hua Community, Xixiang Street, Baoan District, Shenzhen
Country	P.R.China
Brand Name	ecozy
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 19 MODELS	BASIC LISTEE MODELS
IM-NS281B	
IM-NS281A, IM-NS280C, IM-NS281C, IM-NS280A	HZB-15NB
IM-NS280B	HZB-15N/S
IM-NS451A, IM-NS451B, IM-NS451C, IM-NS451D, IM-NS451G, IM-NS451H, IM-NS452A, IM-NS452B, IM-NS452C, IM-NS452D, IM-NS452G, IM-NS452H, IM-NS462A, IM-NS462B, IM-NS462C, IM-NS462D, IM-NS462G, IM-NS462H	HZB-15N
	HZB-20EN

9.0 Correlation Page For Multiple Listings

MULTIPLE LISTEE 22	Ningbo Hoome Information Technology Co., Ltd.	
Address	Room 602-2, Building 1-2, Qianyang Star Plaza, No. 996, Changxing Road, Jiangbei District, Ningbo, Zhejiang 315336	
Country	P.R.China	
Brand Name	EUHOMY, ICEVIVAL, SIMZLIFE, ICEVIVAL	
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0	
Address		
Country		
MULTIPLE LISTEE 22 MODELS		BASIC LISTEE MODELS
IM-12S, IM-12D, IM-12X, IM-12X-HM, IM-12D-HM, IM-12S-HM		
IM-12G, IM-12G-AZ-HM, ZX-IM-12G-AZ-HM, IM-12G-WM-HM, ZX-IM-12G-WM-HM, IM-12G-TK-HM, ZX-IM-12G-TK-HM, IM-12G-HZ-HM, ZX-IM-12G-HZ-HM, IM002-NSI		
IM-12S, IM-12S-AZ-HM, ZX-IM-12S-AZ-HM, IM-12S-WM-HM, ZX-IM-12S-WM-HM, IM-12S-TK-HM, ZX-IM-12S-TK-HM, IM-12S-HZ-HM, ZX-IM-12S-HZ-HM, IM002-NBL		HZB-15NA
		HZB-15N/S
		HZB-15N
IM-15S, IM-15S-AZ-HM, ZX-IM-15S-AZ-HM, IM-15S-WM-HM, ZX-IM-15S-WM-HM, IM-15S-TK-HM, ZX-IM-15S-TK-HM, IM-15S-HZ-HM, ZX-IM-15S-HZ-HM		HZB-15NB
IM013-N		HZB-15NB/S
IM015-N, IM-16S, IM015-NBL-USEH, IM015-NBL-USZX, IM015-NBL-CAEH, IM015-NBL-CAZX		HZB-20EN
		HZB-15EN
IM017-N, IM017-NBL-USEH, IM017-NBL-USZX, IM017-NBL-CAEH, IM017-NBL-CAZX		HZB-15NF
		HZB-20DN
IM023-N, IM023-NBL-USEH, IM023-NBL-USZX, IM023-NBL-CAEH, IM023-NBL-CAZX, IM023-N1BL-USEH, IM023-N1BL-USZX, IM023-N1BL-CAEH, IM023-N1BL-CAZX		HZB-15DN
IM027-N, IM027-NBS-USEH, IM027-NBS-USZX, IM027-NBS-CAEH, IM027-NBS-CAZX		
IM048-N, IM048-NBS-USZX, IM048-NBS-USEH, IM048-NBS-CAZX, IM048-NBS-CAEH		

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 23	Nanjing VividMoo Home Co., Ltd
Address	C-2 NO.4 Guping GangGulou District, Nanjing, Jiangsu, 210008
Country	P.R.China
Brand Name	Vividmoo
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 23 MODELS	BASIC LISTEE MODELS
HZB-15N/S	HZB-15N/S

9.0 Correlation Page For Multiple Listings

MULTIPLE LISTEE 25	Shenzhen Junge Yunchuang Technology Co., Ltd.	
Address	Room 262, Building W2-B, High-tech Industrial Village, No. 025, High-tech South 4th Road, High-tech Zone Community, Yuehai Street, Nanshan District, Shenzhen, Guangdong 518101	
Country	P. R. China	
Brand Name	ecozy	
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0	
Address		
Country		
MULTIPLE LISTEE 25 MODELS		BASIC LISTEE MODELS
NS280G, N280G, N280D		HZB-15N
IM-ND332G, IM-ND332A, IM-ND332B, IM-ND332C, IM-ND333G, IM-ND333A, IM-ND333B, IM-ND333C, IM-ND334G, IM-ND334A, IM-ND334B, IM-ND334C		HZB-15DN

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 28	CICA HOMORE INC
Address	11190 White Birch Dr Suite 100, Rancho Cucamonga, CA 91730
Country	USA
Brand Name	E-MACHT
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 28 MODELS	BASIC LISTEE MODELS
ET97005	HZB-20AN

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 30	VIVOHOME INC.
Address	3350 SHELBY ST, STE 200, ONTARIO, CA, 91764
Country	USA
Brand Name	VIVOHOME
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 30 MODELS	BASIC LISTEE MODELS
VH1577-BK, VH1577-SL, VH1577-followed by up to ten letters, the undefined letters indicate color.	
VH1575, VH1575-followed by up to ten letters, the undefined letters indicate color.	HZB-15NB/S
	HZB-20EN
VH1180-SL, VH1180-BK, VH1180-followed by up to ten letters, the undefined letters indicate color.	HZB-20BN
	HZB-15N/S
VH1211, VH1211-BK, VH1211-followed by up to ten letters, the undefined letters indicate color.	

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 31	TRILEAF DISTRIBUTION TRIFEUIL
Address	M4S 2B8, TORONTO
Country	Canada
Brand Name	Vida by Paderno
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 31 MODELS	BASIC LISTEE MODELS
HH1011424, 043-1568-2	HZB-15N/S

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 32	Boost Doctors LLC
Address	3602 W Sample Street, South Bend, IN 46619
Country	USA
Brand Name	COMMODORE
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 32 MODELS	BASIC LISTEE MODELS
CMNIM-01B	HZB-15NA

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 33	SHANGHAI SISHUN ELECTRONIC COMMERCE CO., LTD
Address	1701 Midea Real Estate Building, Shunde District, Foshan City, Guangdong Province
Country	China
Brand Name	VEVOR
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 33 MODELS	BASIC LISTEE MODELS
HZB-15N/S	HZB-15N/S

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 34	ERIVESS TRADING, INC.
Address	1560 DRUMHILL DR. HACIENDA HEIGHTS, CA 91745
Country	USA
Brand Name	ERIVESS
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 34 MODELS	BASIC LISTEE MODELS
NBYG-HA304*	HZB-15NB/S

9.0 Correlation Page For Multiple Listings	
MULTIPLE LISTEE 35	CyberChill Limited
Address	Rm 12, 8/F, Tak Lee Industrial Centre Block B, Tsing Yeung Circuit, Tuen Mun, Hong Kong, Tuen Mun, 999077
Country	P. R. China
Brand Name	cyberchill
ASSOCIATED MANUFACTURER	All manufacturers shown in Section 1.0
Address	
Country	
MULTIPLE LISTEE 35 MODELS	
IM-NS452C, IM-NS453A, IM-NS453C, IM-NS453D, IM-NS463A, IM-NS463C, IM-NS463D	
BASIC LISTEE MODELS	
	HZB-20EN

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

For Canadian standards, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

If all standards on the ATM have the same standard title, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.

Due to particular testing requirements, some components may be requested to be shipped to specific

Managing CEC Location:

Intertek Testing Services (Shanghai FTZ) Co., Ltd

ETL Component Evaluation Center

Building No. 86, 1198 Qinzhou Road (North)

Shanghai 200233, China

Attn: Ms. Emiliana Zhou

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

Dielectric Voltage Withstand Test
Grounding Continuity Test
Pressure Tests For Leakage and Strength

11.1 Dielectric Voltage Withstand Test

Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contractors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
All products covered by this Report.	800V	1 s
Product - One sample from each shipment of transformer (Section 4.0, item 4.20, 27, 27a, 27b):	Test Voltage	Test Time
Between pre. and sec. output	2000V peak	1s
Between sec. and core	800V peak	1s

11.2 Grounding Continuity Test

Method

Each product listed below shall be subjected to a test to determine that there is continuity between accessible dead-metal parts of the product and the grounding pin or blade of the attachment plug.

If all accessible dead metal is connected, only a single test need be performed. A visual or audible device (ohmmeter, buzzer, etc.) may be used to indicate grounding continuity.

Products Requiring Grounding Continuity Test:

All products covered by this Report.

11.3 Pressure Tests for Leakage and Strength

Method

As a routine production-line verification, each refrigerator shall be tested and proved tight at not less than the design pressures marked on the refrigerator.

If the final assembly of a self-contained refrigerator is completed with flare-type fittings or telescoped tubing joints that are sealed with solder, brazing, or the equivalent to the pressure test method.

At least once each year, the manufacturer shall conduct a strength test on refrigerant containing or carbon dioxide-pressured parts of the shell type, including compressor shells that have an inside diameter greater than 3inches(76mm). The test is to be conducted on at least one sample of each size and type. The sample shall be proved tight when subject to strength test.

Products Requiring Pressure Tests for Leakage and Strength:

All products covered by this Report.

High-side parts tested by 290 psig (2000 kPa), low-side parts tested by 88 psig (634 kPa).

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
6-Apr-2010	Zephyr Huang	4	11c	Correct the current from 0.25A to 0.23A
SH10011256SHA	Jim Zhao			
30-Aug-2010	Brian Zhang	7	8A	Add illustration no. 8A, model IMD250 for multiple listee no.2, Avanti Products
SH10081350SHA	Zephyr Huang	9		Add multiple listee no.2, Avanti Products
14-Mar-2011	Brian Zhang	7	8B	Add illustration no. 8B, model AI-120S for multiple listee no.3, Newair Asia Co., Ltd.
SH11030676SHA	Zephyr Huang	9		Add multiple listee no.3, Newair Asia Co., Ltd.
20-May-2011	Brian Zhang	7	8C	Add illustration no. 8C, model IM-2085 for multiple listee no.4, SALTON
SH11051032SHA	Zephyr Huang	9		Add multiple listee no.4, SALTON
14-Jan-2013	Brian Zhang	4	4d	Add alternative ice-melting valve, FDF-2A by Tianchang Tianhao
SH13010219SHA	Zephyr Huang	4	8c	Add alternative syn. motor, MS by Ming Jong
		4	10e	Add alternative condenser fan motor, PY-1225H12S by Poweryear
		4	16g	Revise rated voltage
		4	17d	Add alternative acorss-the-line capacitor, MPX-X2 by Fu Xin Pan
		4	22g	Add alternative quick-connect terminals, NL6.3A-005 by NADELI
		4	23f	Add alternative marking label
		4	format	Unmerge cells for "photo" column
		8	test	Perform necessary tests due to added fan motor
20-May-2014	Brian Zhang	3	15, 16	Add pictures for new supply method by SMPS
140500302SHA	Zephyr Huang	4, 5	4c	Remove annual test status for valve of DTF-1
		4	8, 9	Add current mfr. name Wuxi Dexun Fuda Motor Co., Ltd. before its former name Wuxi Dexun Micro Motor Co., Ltd.
		4	16h	Add alternative relay model JQC-3FF by Ningbo Zettler Electronics Co., Ltd.
		4	16-18, 20, 21	Share common components in pictures for previous PWB and SMPS
		4	24-27	Introduce specific components for SMPS
		7	all marking	Remove "M91" behind C22.2 No.120 since the CSA standard is updated to edition March 2013; remove CAN in std. name
		1, 8	std.	Update standard of UL 563, 8th edition from 31-Jul-2009 to revised 29-Nov-2013; Update standard from CAN/CSA C22.2 No. 120, R2004 to CSA C22.2 No. 120, dated March 2013; Necessary tests are performed due to std. update; amend standard of UL 1310 and CSA C22.2 No. 223 because SMPS is introduced

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
17-Mar-2016	Jimmy Zhang	4	4c	Change the manufacturer name from "CHANGZHOU CHANGHENG LUSI ELECTRIC APPLIANCE CO LTD" to "CHANGZHOU LUSI ELECTRIC APPLIANCE CO LTD"
160301761SHA	Brian Zhang	7	8D	Add marking label of model 457312 SLV with brand name IMPROVEMENTS for M/L No. 5, Improvements Catalog
		9	M/L No. 5	Add M/L No. 5, Improvements Catalog, and its model 457312 SLV with brand name IMPROVEMENTS, corresponding to basic model HZB-12D
25-Apr-2016	Jimmy Zhang	2	Model, Simil., Rating	Add new model HZB-12E, HZB-12EH, and add their model similarity and ratings
160401307SHA	Brian Zhang	3	1-16	Add " - HZB-12D" in the photo description
		3	17-25	Add photos for new model HZB-12E, HZB-12EH
		3	26,27	Add photos for main PWB of HZB-12E
		3	28,29	Add photos for main PWB of HZB-12EH
		3	30,31	Add photos for control PWB of HZB-12E, HZB-12EH
		4	4c	Add alternative model BTH-12ZA, 12EA-2A by this factory
		4	4e	Add alternative ice-melting valve manufactured by Jiangsu Debayi Refrigeration Equipment Co., Ltd.
		4	7	Add " - HZB-12D" in the item description
		4	17e	Add alternative Across-the-line Capacitor manufactured by Huizhou Rongda Electronics Co Ltd
		4	17f	Add alternative Across-the-line Capacitor manufactured by Jyh Chung Electronic Co., Ltd
		4	18j	Add alternative varistor manufactured by Guangxi New Future Information Industry Co Ltd
		4	18h	Add alternative varistor manufactured by JYA-NAY Co., Ltd.
		4	20f	Add alternative fuse manufactured by Shenzhen Lanson Electronics Co., Ltd.
		4	20g	Add alternative fuse manufactured by Sunny East Enterprise Co., Ltd.
		4	21i	Add alternative PWB manufactured by Hangzhou Baolin Printed Circuit Co., Ltd.
		4	21j	Add alternative PWB manufactured by Wenzhou Inttli Electech Co., Ltd.
		4	21k	Add alternative PWB manufactured by Hangzhou Linan Pengyu Electronics Co., Ltd.
		4	21l	Add alternative PWB manufactured by Xian Xidian Electrical Co., Ltd.
		4	26a	Add alternative Y capacitor manufactured by JYH HSU ELECTRONICS LTD
		4	28	Add compressor information for new model HZB-12E, HZB-12EH
		4	29	Add water-inlet valve information for new model HZB-12EH
		7	III. 1	Add markings of HZB-12E, HZB-12EH
		8	Test Items	Add test items owing to adding new model HZB-12E, HZB-12EH

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
13-Sep-2016	Jimmy Zhang	7	8E	Add marking label of model 547303 SLV with brand name IMPROVEMENTS as representative for M/L No. 5, Improvements Catalog
160900035SHA	Brian Zhang	9	M/L No. 5	Add new model 547303 *** (* = A to Z, *** indicate the different color of ice makers) with brand name IMPROVEMENTS for M/L No. 5, Improvements Catalog, corresponding to basic model HZB-12E
14-Nov-2016	Jimmy Zhang	1	Mfr.	Add manufacturer 2: Ningbo Jinbangda Intelligent Vending Equipment Co., Ltd. / No. 55, 4th Binhai Road, Hangzhou Bay New Zone, Ningbo, Zhejiang 315336, P.R.China
161001128SHA	Brian Zhang	4	4	Correct the model from " FDF2A08 " to " FDF2A "
		4	4c	Change the manufacturer name from "CHANGZHOU LUSI ELECTRIC APPLIANCE CO LTD" to "CHANGZHOU CHANGHENG LUSI ELECTRIC APPLIANCE CO LTD"
		7	III. 1A	Add label of model HZB-12D with new control no. 5005616 as representative for Manufacturer 2: Ningbo Jinbangda Intelligent Vending Equipment Co., Ltd.
		9	M/L No. 1 - 5	Change the description of ASSOCIATED MANUFACTURER from " Ningbo New Hicon Electrical Appliance Co., Ltd." to " All manufacturers shown in Section 1.0 ", change the Address and Country to blank from 1st Xingci Road, 4th Binhai Road, Hangzhou Bay New Zone, Cixi, Ningbo, Zhejiang Province 315336 / P.R.China
12-Dec-2016	Jimmy Zhang	7	III. 8F	Add label of model IDC-221SC with brand name Whynter for M/L No. 6, WHYNTER LLC
161200373SHA	Brian Zhang	7	III. 8G	Add label of model ICE227-SILVER with brand name IGLOO as representative for M/L No. 7, Curtis International Ltd
		9	M/L No. 6	Add M/L No. 6, WHYNTER LLC, and its model IDC-221SC with brand name Whynter, corresponding to basic model HZB-12EH
		9	M/L No. 7	Add M/L No. 7, Curtis International Ltd, and its model ICE227-* (* = any letters from A to Z to represent the different color of ice makers) with brand name IGLOO, corresponding to basic model HZB-12E
15-Jan-2018	Jimmy Zhang	4	8b	Update the manufacturer name from "CIXI JIULING ELECTRIC APPLIANCE CO LTD" to " NINGBO JIULING MOTOR CO LTD", and update the model from " 49TYJ-B" to "49TYJ"
180100302SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
18-Sep-2018	Darren Zhao	7	Original III. No. 3-8, 8A, 8C, 8D, 8E	Remove the nameplates for all models of brand Haier, AVANTI, SALTON and IMPROVEMENTS, corresponding to M/L No. 1, 2, 4 and 5.
180900840SHA	Kent Zhang	7	Original III. No. 8B, 8F, 8G, 9	Change the illustration number, from "Illustration No. 8B" to "Illustration No. 1B for M/L No. 3", from "Illustration No. 8F for ML 6" to "Illustration No. 1C for M/L No. 6", from "Illustration No. 8G for M/L No. 7" to "Illustration No. 1D for M/L No. 7", and from "Illustration No. 9" to "Illustration No. 1D for M/L No. 3".
		7	III. No. 1E	Add nameplate of model "EFIC227-*" for Multiple Listee No. 7, Curtis International Ltd.
		9	M/L No. 1	Remove Multiple Listee No. 1 with all models including HPIMD25B, HPIMD25S, HPIMD25W, ZHPIMD25B, ZHPIMD25S and ZHPIMD25W of brand Haier, company name Haier America Trading LLC.
		9	M/L No. 2	Remove Multiple Listee No. 2 with model IMD250 of brand AVANTI, company name Avanti Products, A Division of The Mackle Co., Inc.
		9	M/L No. 4	Remove Multiple Listee No. 4 with model IM-2085 of brand SALTON, company name Salton Appliances (1985) CORP./SWG CANADA.
		9	M/L No. 5	Remove Multiple Listee No. 5 with all models including 457312 SLV and 547303 *** (* = A to Z) of brand IMPROVEMENTS, company name Improvements Catalog.
		9	M/L No. 7	Add new model "EFIC227-*" of brand FRIGIDAIRE with modifying remark for Multiple Listee No. 7, Curtis International Ltd., corresponding to basic model HZB-12E.
25-Nov-2019	Jesse Jin	1	-	Rewrote the UL standard to match GSSQ
191002684SHA	Kent Zhang	1	-	Modify the applicant's address from "No.68 Kaifa Road, Zhouxiang Town, Cixi City, Ningbo, Zhejiang Province 315324" to "No.55, 4th Binhai Road, Hangzhou Bay New Zone, Ningbo, Zhejiang 315336". Modify the name and address of Manufacturer 1 from "Ningbo New Hicon Electrical Appliance Co., Ltd." and "1st Xingci Road, 4th Binhai Road, Hangzhou Bay New Zone, Cixi, Ningbo, Zhejiang Province 315336" to "Ningbo Hicon International Industry Co., Ltd." and "No.55, 4th Binhai Road, Hangzhou Bay New Zone, Ningbo, Zhejiang 315336". Delete Manufacturer 2 "Ningbo Jinbangda Intelligent Vending Equipment Co., Ltd." and its information.
		2	-	Add new model HZB-30D and revised its Model Similarity, Ratings as well.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		3	32-49	Add photos for new model HZB-30D.
		4	21	Add alternative main PWB for HZB-30D, models SY-S, SYDZ520 manufactured by GUANGDE SANYO ELECTRONICS CO LTD; models H-01, H-02 manufactured by WENZHOU HUABANG ELECTRONICS CO LTD.
		4	25a	Add Optical Isolators for transformer, models 817, EL817 manufactured by EVERLIGHT ELECTRONICS CO LTD; model PC817 manufactured by SHARP CORP ELECTRONIC COMPONENTS AND DEVICES GROUP; model FOD817 manufactured by FAIRCHILD SEMICONDUCTOR CORP.
		4	27a	Add alternative Switching Transformer for HZB-30D.
		4	30	Add UL approved compressor for HZB-30D, model QD32R11 manufactured by NINGBO ANUODAN MACHINERY CO LTD.
		7	1A	Delete the existing marking for Manufacturer 2. Add marking for new model HZB-30D.
		8	-	Update the Test Summary.
25-May-2020	Jesse Jin	9	M/L 7	Modify the M/L 7 address from "315 Attwell Drive, Toronto, ON, M9W 5C1" to "7045 BECKETT DRIVE, UNIT 15 MISSISSAUGA, ONTARIO L5S 2A3". Add new M/L 7 model EFIC227-**, corresponding to basic model HZB-12E.
200501892SHA	Kent Zhang			
11-Aug-2020	Jesse Jin	1	-	Update the latest UL standard from "UL 563:2009 Ed.8+R:29Nov2013" to "UL 563:2009 Ed.8+R:30Aug2018". Rewrote the CSA standard to match EDGE.
200702841SHA	Kent Zhang	2	-	Add new models HZB-18N, HZB-20N, HZB-22N, HZB-25N and their ratings and model similarity. Add ratings for HZB-12E, HZB-12EH equipped with new compressor with refrigerant R600a.
		3	1-16	Renumber the photo number from "1-16" to "1.1-1.16".
			17-31	Renumber the photo number from "17-31" to "2.1-2.15".
			32-49	Renumber the photo number from "32-49" to "3.1-3.18".
			13,14	Delete original photo 13-14, view of transformer, model HKTR48-11510 - HZB-12D
			2.5a	Alternative compressor (L48C5L) for HZB-12E, HZB-12EH
			4.1-4.20	Add photos for new model HZB-20N.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		4	5	Delete the information of Liner Transformer, model HKTR48-11510 manufactured by NINGBO HICON and its CEC Comps.
			13	Add alternative PWB Box, model AF365F manufactured by LG CHEMICAL LTD.
			28	Add alternative compressor, model L48C5L manufactured by HUAYI COMPRESSOR (JINGZHOU) CO LTD.
			4.1	Add plug for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 1)
			4.2	Add power cord for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 2)
			4.3	Add Enclosure Plastic for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 3)
			4.4	Add UV lamp, model UV-LED-C26 manufactured by WUXI PHOEBE TECHNOLOGY CO LTD.
			4.5	Add internal wire for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 14)
			4.6	Add PWB box for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 13)
			4.7	Add Water-inlet valve for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 29)
			4.8	Add Ice pushing motor, model SJ-0066/105JC640G1312 manufactured by NINGBO HICON.
			4.9	Add Water pump for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 11)
			4.10	Add Condenser Fan Motor for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 10)
			4.11	Add Condenser coil for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 6)
			4.12	Add Evaporator for models HZB-18N, HZB-20N, HZB-22N, HZB-25N.
			4.13	Add compressor, model L48C5L manufactured by HUAYI COMPRESSOR (JINGZHOU) CO LTD.
			4.14	Add Relay for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 16)
			4.15	Add Across-the-line Capacitor for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 17)
			4.16	Add Varistor for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 18)
			4.17	Add Fuse for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 20)
			4.18	Add Optical Isolators for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 25)
			4.19	Add Y capacitor for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 26)
			4.20	Add transformer for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 27)
			4.21	Add main PWB for models HZB-18N, HZB-20N, HZB-22N, HZB-25N. (identical with item 21)

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		5	4.8	Add CEC comps for Ice pushing motor
		7	1AA	Add Markings for HZB-12E, HZB-12EH equipped with compressor L48C5L.
			1AB	Add Markings for HZB-18N, HZB-20N, HZB-22N, HZB-25N.
		8	-	Update the Test Summary.
3-Sep-2020	Magnus Chen/ Even Li	7	1F	Add marking for M/L No. 8, model 21380.
200900094SHA	Kent Zhang	9	8	Add M/L No. 8, "BOBBY'S DIRECT LLC" with its model "21380" corresponding to basic model HZB-20N.
15-Oct-2020	Magnus Chen/ Even Li	6	11	change the ML model similarity description from "the brand name of model EFIC227-* is FRIGIDAIRE." to "the brand name of models EFIC227-*, EFIC227-**, EFIC235-** are FRIGIDAIRE."
201000533SHA	Kent Zhang	9	7	Add new model EFIC235-** with brand "FRIGIDAIRE" into M/L No.7, corresponding to basic model HZB-20N.
30-Nov-2020	Magnus Chen	1	-	Change standard description from "Refrigeration Equipment (R2018) [CSA C22.2#120:2013 Ed.4]" to "Refrigeration Equipment (R2018)>Valid without technical revision: 29Sep2024< [CSA C22.2#120:2013 Ed.4]".
201102439SHA	Kent Zhang	7	1G	Add marking for M/L No. 9, model HME010504N.
		9	9	Add M/L No. 9, "Mohawk Group Inc" with its model "HME010504N" corresponding to basic model HZB-20N.
6-May-2021	Magnus Chen	1	/	Change standard description from "Refrigeration Equipment (R2018)>Valid without technical revision: 29Sep2024< [CSA C22.2#120:2013 Ed.4]" to "Refrigeration Equipment (R2018)>Partial superseding< [CSA C22.2#120:2013 Ed.4]".
210400624SHA	Kent Zhang	2	/	Add new models HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN and their ratings and model similarity, which are same with HZB-18N, HZB-20N, HZB-22N, HZB-25N respectively, except the outer appearance.
		3	4.1a	Add photo of Top view for HZB-20N.
		3	4.1b	Add photo of Alternative front view for HZB-20N.
		3	4.1c	Add photo of Alternative top view for HZB-20N.
		3	4.1d	Add photo of Front view for HZB-20AN.
		3	4.18a	Add photo of Alternative Control panel PCB view for HZB-20N (front).
		3	4.18b	Add photo of Alternative Control panel PCB view for HZB-20N (rear).
		7	/	Delete all ETL logo on marking table.
		9	9	Add new model HME010694N for M/L No. 9, "Mohawk Group Inc", corresponding to basic model HZB-20N.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
28-Jul-2021	Magnus Chen	4	2.4.2	Correct "SJT-3" to "SJT".
210603110SHA	Kent Zhang	6	11	Update model similarity for M/L No. 7.
		6	12	Add description of Logo Dependent Marking
		7	1H	Add marking label for M/L No.10.
		9	7	Replace "*" with "followed by up to fifteen letters", for M/L No. 7, "Curtis International Ltd.".
		9	7	Add new model EFIC237- followed by up to fifteen letters for M/L No. 7, "Curtis International Ltd.", corresponding to basic model HZB-20N.
		9	10	Add M/L No.10 GOPLUS CORP, brand name COSTWAY, with its model EP24509US, FP10023US, respectively corresponding to basic models HZB-12E, HZB-20N.
17-Aug-2021	Magnus Chen	7	1I	Add marking label for M/L No.11.
210800891SHA	Kent Zhang	9	11	Add M/L No.11 NewAir LLC, brand name NewAir, with its models NIM044BS00, NIM044BS01, NIM044SS00, corresponding to basic model HZB-20AN.
12-Jan-2022	Jesse Jin	2	-	Add new models HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN with their Model Similarity and Ratings.
211102628SHA	Kent Zhang		-	Add new Brand name Antarctic Star, AGLUCKY, R.W.FLAME, R.W.FLAME, Free Village.
		3	2.15, 2.16	Add alternative Main PWB view for HZB-12E, HZB-12EH.
			4.3a-4.3e, 4.10a-4.10e, 4.11a, 4.13a, 4.16a, 4.17a, 4.20, 4.20a	Add photos for model HZB-20BN.
		4	8	Add alternative Synchronous Motor, model TY-50.
			16	Add alternative Relay, manufactured by HSIN DA PRECISION CO LTD, YUEQING MEISHUO ELECTRIC TECHNOLOGY CO LTD, NINGBO TIANBO GANGLIAN ELECTRONICS CO LTD.
			17	Add alternative Across-the-line Capacitor, manufactured by Dain Electronics Co., Ltd., QIRONG ELECTRONIC TECHNOLOGY CO LTD, DONGGUAN CHENGdong ELECTRONIC TECHNOLOGY CO LTD, JIMSON ELECTRONICS CO LTD, HUIZHOU RONGDA ELECTRONICS CO LTD.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		4	18	Add alternative Vairstor, manufactured by HUIZHOU SHI SONGLONG LISHANG ELECTRONI, DONGGUAN CHENGDDONG ELECTRONIC TECHNOLOGY CO.,LTD, KESTAR ELECTRONIC (CHINA) CO LTD, Guangxi New Future Information Industry Co Ltd, THINKING ELECTRONIC INDUSTRIAL CO LTD, CENTRA SCIENCE CORP, JYH HSU (JEC) ELECTRONICS LTD, ZHEJIANG HUANG-YAN SAILING ELECTRONICS CO LTD, GUANGZHOU YES ELECTRONIC TECHNOLOGY CO LTD, Guangdong Huiwan Electronics Technology Co Ltd.
			20	Add alternative Fuse, manufactured by SHANGHAI FULLNESS TECHNICAL CO LTD, DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO.,LTD, DONGGUAN CHEVRON ELECTRONIC TECHNOLOGY CO LTD, SUZHOU WALTER ELECTRONIC CO LTD, CONQUER ELECTRONICS CO LTD, XC ELECTRONICS (SHENZHEN) CORP LTD, HONG HU BLUELIGHT ELECTRONIC CO LTD.
			21	Add alternative Main PWB.
			25	Add alternative Optical Isolators, manufactured by LITE-ON TECHNOLOGY CORP, Shenzhen Orient Components Co., Ltd.
			25a	Add alternative Optical Isolators, manufactured by Shenzhen Orient Components Co., Ltd., JIEJIE MICROELECTRONICS (Shenzhen) Co Ltd.
			26	Add alternative Y capacitor, manufactured by DONGGUAN QINHONG(QNR) ELECTRONICS CO LTD, JYH HSU(JEC)ELECTRONICS LTD, GUANGZHOU YES ELECTRONIC TECHNOLOGY CO LTD, HAOHUA ELECTRONIC CO., NANJING JINGWEI ELECTRONICS CO LTD.
			27	Add alternative Switching Transformer, model WX-E19123 manufactured by FOSHAN SHUNDE WANXIN ELECTRONIC ELECTRICAL CO.,LTD.
			28	Add alternative Compressor for models HZB-12E, HZB-12EH.
			4.13	Add Alternative compressor for models HZB-**N, HZB-**AN, HZB-**BN series.
			4.14	Add Alternative Relay.
			4.15	Add Alternative Across-the-line Capacitor.
			4.16	Add Alternative Varistor.
			4.17	Add Alternative Fuse.
			4.19	Add Alternative Y capacitor.
			4.20	Add Alternative Switching Transformer.
			4.21	Add Alternative Main PWB.
			4.22	Add Self-priming water pump for models HZB-**N, HZB-**AN, HZB-**BN series.
			4.23	Add Water-inlet valve for models HZB-**N, HZB-**AN, HZB-**BN series.
		7	1AC	Add markings for models HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN.
			1B	Deleted markings for M/L 3, Newair Asia Co., Ltd.
		8	-	Update the Test Summary.
		9	-	Deleted M/L 3, Newair Asia Co., Ltd.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
2-Mar-2022	Richard Zheng/ Even Li	7	1J	Add marking label for M/L No.12.
220300097SHA	Kent Zhang	9	12	Add M/L No.12 NINGBO UNISUN TRADE CO.,LTD, brand name BETELNUT, ACIPENSER and OUTGAVA, with its models HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN, corresponding to basic model HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN.
15-Apr-2022	Jesse Jin	2	-	Add new models HZB-18CN, HZB-20CN, HZB-22CN, HZB-25CN with their Model Similarity and Ratings.
220400532SHA	Kent Zhang	3	4.3f-4.3i, 4.6a-4.6b, 4.10f-4.10i, 4.20b- 4.20c	Add photos for model HZB-20CN.
		7	1AD	Add marking for model HZB-20CN.
			1E	Add marking for ML7.
		9	ML7	Add new models EFIC255- followed by up to fifteen letters and brand name FRIGIDAIRE GALLERY for ML7, corresponding to basic model HZB-20CN.
22-Apr-2022	Richard Zheng/ Even Li	7	1K	Add representative marking label for M/L No.7.
220301865SHA	Kent Zhang	9	7	Add model HBIC3070 or HBIC3070-followed by up to fifteen letters, EFIC239 or EFIC239-followed by up to fifteen letters, corresponding to basic model HZB-20N, HZB-20BN, with brand name Hamilton Beach in M/L No.7 Curtis International Ltd.
16-May-2022	Jesse Jin	9	ML13	Add new ML13 SeaLoon International Group (HongKong) Limited and its brand name Silonn with its models SLIM08, SLIM08C, SLIM08B, SLIM08S, SLIM08R, SLIM08G1, SLIM08S1, SLIM08B1, SLIM08G, SLIM08W, SLIM08G2, repectively corresponding to basic model HZB-20BN.
220500391SHA	Kent Zhang		ML14	Add new ML14 GuangDong Well Done Trading Co.,Ltd and its brand name HUMHOLD with its models HDZB-12K1, HDZB-12K2, HDZB-20B1, HDZB-20B2, HDZB-20B3, repectively corresponding to basic models HZB-12E, HZB-12EH, HZB-20BN, HZB-20AN, HZB-20N.
2-Jun-2022	Jesse Jin	9	ML15	Add new ML15 FOSHAN QINGTING TECHNOLOGY CO.,LTD and its brand name OSCEVIA with its models OS-20BN, OS-12E, OS-12EH, OS-30D, OS-18N, OS-20N, OS-22N, OS-25N, OS-18AN, OS-20AN, OS-22AN, OS-25AN, OS-18BN, OS-22BN, OS-25BN, repectively corresponding to basic models HZB-20BN, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-22BN, HZB-25BN.
220501638SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
12-Jul-2022	Jesse Jin	9	ML16	Add new ML16 BEACH TRADING COMPANY INC. and its brand name DECO CHEF with its models DGIM44NGBLK, DGIM44NGSTS, corresponding to basic model HZB-20BN.
220700951SHA	Kent Zhang			
15-Dec-2022	Jesse Jin	1	-	Modify the applicant and manufacturer's name and address from "Ningbo Hicon International Industry Co., Ltd." and "No.55, 4th Binhai Road, Hangzhou Bay New Zone, Ningbo, Zhejiang 315336" to "Ningbo Hicon Industry Technology Co., Ltd." and "No.55, 4th Binhai Road, Qianwan New Area, Ningbo, Zhejiang Province".
221101431SHA	Kent Zhang		-	Update the lasted UL standard version from "UL 563:2009 Ed.8+R:30Aug2018" to "UL 563:2009 Ed.8+R:26May2021".
		2	-	Add new models HZB-12N, HZB-15N, HZB-17N, HZB-12NA, HZB-15NA, HZB-17NA, HZB-12NB, HZB-15NB, HZB-17NB, HZB-12N/S, HZB-15N/S, HZB-17N/S, HZB-12NA/S, HZB-15NA/S, HZB-17NA/S, HZB-12NB/S, HZB-15NB/S, HZB-17NB/S, HZB-20DN, HZB-25DN with their Model Similarity and Ratings.
		3	4.3j-4.3ae	Add photos for new models.
			4.6c-4.6d	Add photos for new models.
			4.7	Deleted photo for UV lamp.
			4.10j-4.10p	Add photos for internal view.
			4.16b, 4.17b	Add photos for alternative main control PCB.
			4.20e-4.20h	Add photos for alternative control panel PCB.
			4.22	Add photos for alternative Ice pushing motor.
			4.4	Deleted information of UV lamp.
		4	4.24	Add Ice pushing motor, model RY-CJY-616330-0006A manufactured by NINGBO HICON.
		5	4.24	Add CEC comps for ice pushing motor, model RY-CJY-616330-0006A
		7	1AD	Add markings for new models.
		8	-	Update the Test Summary.
		9	ML17	Add ML 17 HSNi LLC and its brand name IMPROVEMENTS with its model 829058, corresponding to basic model HZB-15N/S.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
5-Jan-2023	Jesse Jin	9	ML16	Add new models DG26NIMSTS, DG26NIMRED, DGADIMN01 for ML16, respectively corresponding to basic models HZB-15N/S, HZB-15N, HZB-20DN.
221202052SHA	Kent Zhang			
16-Jan-2023	Jesse Jin	9	ML18	Add ML 18 SINOWELL SHANGHAI CO LTD and its brand name VIVOHOME with its model VH1180- followed by up to ten letters, the undefined letters indicate color, corresponding to basic model HZB-20BN.
230101288SHA	Kent Zhang			
3-Feb-2023	Jesse Jin	9	ML14	Modify the company address from "1F, 134 Li Guang Road, Lishui Town, Nanhai District, Foshan City, Guangdong Province, China" to "Room 11, 12F, Building A, Wancheng Plaza, Guangfo Road, Foshan City, Guangdong Province". Add new models for ML14, HDZB-12B1, HDZB-12C1, HDZB-12C2, HDZB-12D1, HDZB-12D2, HDZB-15B1, HDZB-15B2, HDZB-15C1, HDZB-15C2, HDZB-15D1, HDZB-15D2, HDZB-20C1, HDZB-20D1, respectively corresponding to basic models HZB-12N, HZB-12NA, HZB-12NA/S, HZB-12NB, HZB-12NB/S, HZB-15N/S, HZB-15N, HZB-15NA, HZB-15NA/S, HZB-15NB, HZB-15NB/S, HZB-20DN, HZB-20CN.
230200189SHA	Kent Zhang			
3-Mar-2023	Jesse Jin	9	ML 13	Modify the address of ML 13 from "LEVEL 54 HOPEWELL CTR 183 QUEEN'S RD EAST HONG KONG" to "6/F Manulife Place, 348 Kwun Tong Road, KL, Hong Kong 999077". Add new models SLIM17C, SLIM17B, SLIM17S, SLIM17R, SLIM17G1, SLIM17, SLIM17B1, SLIM17G, SLIM17W, SLIM17G2, SLIM17S1, SLIM17T, SLIM17TC, SLIM17TB, SLIM17TS, SLIM17TR, SLIM17TG1, SLIM17TS1, SLIM17TB1, SLIM17TG, SLIM17TW, SLIM17TG2, respectively corresponding to basic models HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S.
230300200SHA	Kent Zhang		ML 19	Add ML 19 Shenzhen Junge Yunchuang Technology Co., Ltd. and its brand name ecozy with its models IM-NS280C, IM-NS281C, IM-NS282C, IM-NS280D, IM-NS281D, IM-NS282D, respectively corresponding to basic models HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N, HZB-15N, HZB-15N.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
21-Mar-2023	Jesse Jin	9	ML20	Add ML 20 Comin International Inc. and its brand name FUTURE HOME with its models KF0103-12D,KF0103-12E,KF0103-12EH,KF0103-30D,KF0103-18N,KF0103-20N,KF0103-22N,KF0103-25N,KF0103-18AN,KF0103-20AN,KF0103-22AN,KF0103-25AN,KF0103-18BN,KF0103-20BN,KF0103-22BN,KF0103-25BN,KF0103-18CN,KF0103-20CN,KF0103-22CN,KF0103-25CN,KF0103-12N,KF0103-15N,KF0103-17N,KF0103-12NA,KF0103-15NA,KF0103-17NA,KF0103-12NB,KF0103-15NB,KF0103-17NB,KF0103-12NS,KF0103,KF0103-17NS,KF0103-12NAS,KF0103-15NAS,KF0103-17NAS,KF0103-12NBS,KF0103-15NBS,KF0103-17NBS,KF0103-20DN,KF0103-25DN, respectively corresponding to basic models HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN, HZB-18CN, HZB-20CN, HZB-22CN, HZB-25CN, HZB-12N, HZB-15N, HZB-17N, HZB-12NA, HZB-15NA, HZB-17NA, HZB-12NB, HZB-15NB, HZB-17NB, HZB-12N/S, HZB-15N/S, HZB-17N/S, HZB-12NA/S, HZB-15NA/S, HZB-17NA/S, HZB-12NB/S, HZB-15NB/S, HZB-17NB/S, HZB-20DN, HZB-25DN
230301535SHA	Kent Zhang		ML11	Add new model NIM026MBN0 for ML11, corresponding to basic model HZB-15N.
12-May-2023	Jesse Jin		4.13b	Add photo for alternative compressor M43C5L.
230400664SHA	Kent Zhang	3	4.3af-4.3ah	Add photo for HZB-15NB/S.
			4	Add alternative ice-melting valve, model FDF2A-02C.
		4	16, 4.14	Add alternative Relay, model HF3FF, GH-1A-12LSFT.
			17, 4.15	Add alternative Across-the-line capacitor, model HQX, MPX, MEX, MPX, CBBX2, MPX2, CMPP, MPX/MKP, MKP62. Deleted model MPX, manufactured by JYH HSU (JEC), Dain Eelectronics Co., Ltd., HUIZHOU RONGDA ELECTRONICS CO LTD; model MKP, manufactured by JIMSON ELECTRONICS CO LTD.
			18, 4.16	Delete model MYG10-331, MYG10-471 manufactured by KESTAR ELECTRONIC (CHINA) CO LTD; model 10D471K manufactured by HUIZHOU SONGLONGXINDIAN; model CDSPC-10D471 manufactured by DONG GUAN CHENG DONG. Add alternative Varistor, model SFV10D331K, 10D331, ZVR10D331, CVR-10D331K.
			20, 4.17	Add alternative Fuse, model SPT478.
			21, 4.21	Add alternative Main PWB, model XT02, YFL-D, FLS-D, ILM-R1, SR-01A, VF-D, TCX, TCX-2, ZL-02. Delete model KB6150, manufactured by KINGBOARD LAMINATES HOLDINGS LTD.
			24	Add alternative Triacs, model 97A6/BT131, 97A6/ADS1D80, 97A6/JST131 /BT131, MAC97A8/MAC97A6/BT131, Z0607NS, MAC97A8/MAC97A6/BT131.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		4	25	Add alternative Optical Isolators, model ORMOC3021S series, JOC3021 series. Delete model OR817, manufactured by Shenzhen Orient Components Co., Ltd.
			25a	Add alternative Optical Isolators, model OR817. Delete models ORMOC3021S series, JOC3021 series.
			26, 4.19	Add alternative Y capacitor, model CT7, CE series, CD series, CS, CD, F, CT7-Y1, CT7-Y2, MKP63, JK. Delete model JY series manufactured by JYH HSU ELECTRONICS LTD, model JD series manufactured by JYH HSU (JEC).
			4.12a	Add alternative Evaporator.
			4.13	Add alternative compressor, model M43C5L manufactured by HUAYI COMPRESSOR (JINGZHOU) CO LTD.
			4.18	Add alternative Optical Isolators, model ORMOC3021S series, JOC3021 series.
		8	-	Update the Test Summary.
		9	ML21	Add ML21 Shanghai Hotel Equipment Corp. and its brand name HECMAC, with its models HZB-12DC, HZB-12EC, HZB-12EHC, HZB-30DC, HZB-18NC, HZB-20NC, HZB-22NC, HZB-25NC, HZB-18BNC, HZB-20BNC, HZB-22BNC, HZB-25BNC, HZB-18CNC, HZB-20CNC, HZB-22CNC, HZB-25CNC, HZB-12NC, HZB-15NC, HZB-17NC, HZB-12NAC, HZB-15NAC, HZB-17NAC, HZB-12NBC, HZB-15NBC, HZB-17NBC, HZB-12N/SC, HZB-15N/SC, HZB-17N/SC, HZB-12NB/SC, HZB-15NB/SC, HZB-17NB/SC, HZB-20DNC, HZB-25DNC, respectively corresponding to basic models HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18CN, HZB-20CN, HZB-22CN, HZB-25CN, HZB-12N, HZB-15N, HZB-17N, HZB-12NA, HZB-15NA, HZB-17NA, HZB-12NB, HZB-15NB, HZB-17NB, HZB-12N/S, HZB-15N/S, HZB-17N/S, HZB-12NA/S, HZB-15BN/S, HZB-17NB/S, HZB-20DN, HZB-25DN.
			ML22	Add ML22 Ningbo Hoome Information Technology Co., Ltd. And its brand name EUHOMY, with its models IM-12S, IM-12D, IM-12X, IM-12X-HM, IM-12D-HM, IM-12S-HM, corresponding to basic model HZB-15NA.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
9-Jun-2023	Jesse Jin	9	ML7	Add new models EFIC228-SSBLACK, EFIC228-SS followed by up to fifteen letters, EFIC256-BLACK, EFIC256-NAVY, EFIC256-GREY, EFIC256-followed by up to fifteen letters, EFIC165-BLACK, EFIC165-followed by up to fifteen letters for ML7, respectively corresponding to basic models HZB-15NB, HZB-15NB, HZB-15NB, HZB-20CN, HZB-20CN, HZB-20CN, HZB-20CN, HZB-20CN, HZB-20CN.
2306A0290SHA	Kent Zhang			
16-Jun-2023	Jesse Jin	9	ML23	Add ML23 Nanjing VividMoo Home Co., Ltd and its brand name Vividmoo, with its model HZB-15N/S, corresponding to basic model HZB-15N/S.
2306A0603SHA	Kent Zhang		ML24	Add ML24 NANTEX & NORTHFIELD TRADING COMPANY. LTD. and its brand name Wolmds, with its model HZB-15N/S, corresponding to basic model HZB-15N/S.
26-Jun-2023	Jesse Jin	9	ML19	Add new brand name EASYERA for ML19. Add new model IM-NS280G, corresponding to basic model HZB-15N.
2306A0963SHA	Kent Zhang			
27-Jul-2023	Jesse Jin	9	ML25	Add ML25 Shenzhen Shengzhen Yunchuang Technology Co., Ltd. and its brand name easyera, with its models NS280G, N280G, N280D, corresponding to basic model HZB-15N.
2307A0798SHA	Kent Zhang		ML19	Deleted models IM-NS280C, IM-NS281C, IM-NS282C for ML19.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
16-Aug-2023	Jesse Jin	9	ML26	Add ML26 SHAOXING PROCCHIO TEXTILE CO., LTD and its brand name POBWAM, with its models HZLS-15NS, HZLS-12D, HZLS-12E, HZLS-12EH, HZLS-30D, HZLS-18N, HZLS-20N, HZLS-22N, HZLS-25N, HZLS-18AN, HZLS-20AN, HZLS-22AN, HZLS-25AN, HZLS-18BN, HZLS-20BN, HZLS-22BN, HZLS-25BN, HZLS-18CN, HZLS-20CN, HZLS-22CN, HZLS-25CN, HZLS-12N, HZLS-15N, HZLS-17N, HZLS-12NA, HZLS-15NA, HZLS-17NA, HZLS-12NB, HZLS-15NB, HZLS-17NB, HZLS-12NS, HZLS-17NS, HZLS-12NAS, HZLS-15NAS, HZLS-17NAS, HZLS-12NBS, HZLS-15NBS, HZLS-17NBS, HZLS-20DN, HZLS-25DN, respectively corresponding to basic models HZB-15N/S, HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN, HZB-18CN, HZB-20CN, HZB-22CN, HZB-25CN, HZB-12N, HZB-15N, HZB-17N, HZB-12NA, HZB-15NA, HZB-17NA, HZB-12NB, HZB-15NB, HZB-17NB, HZB-12N/S, HZB-17N/S, HZB-12NA/S, HZB-15NA/S, HZB-17NA/S, HZB-12NB/S, HZB-15NB/S, HZB-17NB/S, HZB-20DN, HZB-25DN.
2308A0478SHA	Kent Zhang	9	ML13	Modify the address of ML 13 from "6/F Manulife Place, 348 Kwun Tong Road, KL, Hong Kong 999077" to "UNIT 2601-05 26/F DELTA HOUSE NO 3 ON YIU STREET SHATIN NT, Hong Kong 999077". Add new models SLIM24C, SLIM24B, SLIM24S, SLIM24R, SLIM24G1, SLIM24BU, SLIM24G, SLIM24W, SLIM24G2, SLIM24S1, SLIM24, SLIM24TC, SLIM24TB, SLIM24TS, SLIM24TR, SLIM24TG1, SLIM24TS1, SLIM24TBU, SLIM24TG, SLIM24TW, SLIM24TG2, respectively corresponding to basic models HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S.
12-Sep-2023	Jesse Jin	9	ML7	Add new models EFIC202-BLACK, EFIC202-WHITE, EFIC202-followed by up to fifteen letters, EFIC254-SSBLACK, EFIC254-SS, EFIC254-SS followed by up to fifteen letters, EFIC254-followed by up to fifteen letters for ML7, respectively corresponding to basic models HZB-20CN, HZB-20CN, HZB-20CN, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N.
2309A0606SHA	Kent Zhang			
14-Sep-2023	Jesse Jin	9	ML11	Add new model NIM026SSN0 for ML11, corresponding to basic model HZB-15N/S.
2309A0797SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
20-Oct-2023	Jesse Jin	2	-	Delete model HZB-12D and its Model Similarity and Rating.
2309A0354SHA	Kent Zhang	3	1.1-1.14	Delete photos for model HZB-12D.
			4.11b	Add photo for alternative internal view of evaporator (top) for HZB-**N, **AN, **BN, **CN series model unit.
			4.20i	Add photos for alternative control panel PCB view for HZB-*N, HZB-*NA, HZB-*NB, HZB-*N/S, HZB-*NA/S, HZB-*NB/S (*=12,15,17).
		4	4	Add alternative ice-melting valve, model FDF-2A12, FDF2A.
			7	Delete compressor, model B30H5.
			8	Add alternative Synchronous Motor, model 49TYJ.
			16, 4.14	Add alternative Relay, model RD-112DM-A-S.
			17, 4.15	Delete Across-the-line Capacitor, model JD manufactured by Jyh Chung Electronic Co., Ltd. Add alternative Across-the-line Capacitor, model MPX, manufactured by DONGGUAN JURCC.
			18, 4.16	Add alternative Varistor, model 10D331K manufactured by DONGGUAN CITY JIANKUN.
			19	Delete Connector, model Type J series, Type H.
			20, 4.17	Add alternative Fuse, model SMT.
			22	Add alternative Terminals, models FAF-250W, FAF-250WS, FAF-250Z, FAF-250ZS
			26, 4.19	Add alternative Y capacitor, models KJ series, SA series, HJ series, HCX.
			4.12b	Add alternative Evaporator.
			4.13	Add alternative Compressor, model UKN43YA.
			4.24	Add alternative Ice pushing motor, model YS-CJY-616330-0007L.
			4.24	Add CEC comps for ice pushing motor, model YS-CJY-616330-0007L.
		7	1	Delete marking for model HZB-12D.
		8	-	Update the Test Summary.
		9	ML27	Add new ML27 Shanghai Qianjing Technology Co., LTD and its brand name Habitio, with its models IM-N11, IM-N11P, IM-N11S, IM-N12, IM-N12P, IM-N12S, respectively corresponding to basic models HZB-15NB/S, HZB-17NB/S, HZB-12NB/S, HZB-20DN, HZB-25DN, HZB-30D.
28-Dec-2023	Jesse Jin	2	-	Add new brand name Kismile, Kndko, Joy Pebble, COWSAR, KISSAIR.
2312A1296SHA	Kent Zhang			
8-Jan-2024	Jesse Jin	9	ML7	Add new models EFIC241-SSBLACK, EFIC241-SS, EFIC241-SS followed by up to fifteen letters for ML7, corresponding to basic model HZB-15N/S.
2401B0412SHA	Kent Zhang			
26-Feb-2024	Jesse Jin	9	ML19	Add new models IM-NS281B, IM-NS281A, IM-NS280C, IM-NS281C, IM-NS280A, IM-NS280B for ML19, respectively corresponding to basic models HZB-15NB, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N/S, HZB-15N.
2402B0383SHA	Kent Zhang			
27-Feb-2024	Jesse Jin	9	ML19	Delete Brand name EASYERA and models IM-NS280D, IM-NS281D, IM-NS282D, IM-NS280G.
2402B0383SHA	Kent Zhang			

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
29-Feb-2024	Jesse Jin	2	-	Add new models HZB-15EN, HZB-20EN, HZB-15EN-W, HZB-15N-W, HZB-15N/S-W, HZB-15NA-W, HZB-15NA/S-W, HZB-15NB-W, HZB-15NB/S-W, HZB-20EN-W and its model similarity and ratings.
2312A0814SHA	Kent Zhang	3	4.3ai-4.3ao	Add photos for new models.
			4.20j-4.20m	Add photos for alternative control panel PCB.
		4	16, 4.14	Add alternative Relay, model 973-12VDC-SL-A.
			17, 4.15	Add alternative Across-the-line Capacitor, model MPX, MPX/MKP, MPX.
			18, 4.16	Add alternative Varistor, model HXR 10D331K, JNR 10D331K, JNR 10D331KH, FTR10D331K, YFT 10D331K, MYD-10K331, QNR-10D331K.
			21, 4.21	Add alternative Main PWB, model DX-D, RJX-D.
			25, 4.18	Add alternative Optical Isolators, model CT3021 series.
			26, 4.19	Add alternative Y capacitor, model JY Series, YB.
			4.22	Add alternative Self-priming water pump, model DJGM-2.
			4.24-4.24b	Delete Ice pushing motor, model YS-CJY-616330-0007L. Add alternative Ice pushing motor, model RY-CJY-616335-0008T, RY-CJY-616335-0009L.
		5	4.24-4.24b	Delete CEC Comps Ice pushing motor, model YS-CJY-616330-0007L. AddCEC Comps for alternative Ice pushing motor, model RY-CJY-616335-0008T, RY-CJY-616335-0009L.
		7	1AE	Add markings for new models.
		8	-	Update the Test Summary.
		9	ML7	Add new models FGIC202-BLACK, FGIC202-WHITE, FGIC202-TEAL, FGIC202-followed by up to fifteen letters for ML7, corresponding to basic model HZB-20CN.
			ML22	Modify the address of ML22 from "602-2, Building 1-2, Qianyang Zhixing Plaza, No. 996 Changxing Road, Jiangbei District, Ningbo, Zhejiang 315000" to "Room 602-2, Building 1-2, Qianyang Star Plaza, No. 996, Changxing Road, Jiangbei District, Ningbo, Zhejiang 315336". Add new brand name ICEVIVAL, SIMZLIFE. Add new models for ML22, IM-12G, IM-12G-AZ-HM, ZX-IM-12G-AZ-HM, IM-12G-WM-HM, ZX-IM-12G-WM-HM, IM-12G-TK-HM, ZX-IM-12G-TK-HM, IM-12G-HZ-HM, ZX-IM-12G-HZ-HM, corresponding to basic HZB-15N/S; IM-12S, IM-12S-AZ-HM, ZX-IM-12S-AZ-HM, IM-12S-WM-HM, ZX-IM-12S-WM-HM, IM-12S-TK-HM, ZX-IM-12S-TK-HM, IM-12S-HZ-HM, ZX-IM-12S-HZ-HM corresponding to basic model HZB-15N; IM-15S, IM-15S-AZ-HM, ZX-IM-15S-AZ-HM, IM-15S-WM-HM, ZX-IM-15S-WM-HM, IM-15S-TK-HM, ZX-IM-15S-TK-HM, IM-15S-HZ-HM, ZX-IM-15S-HZ-HM corresponding to basic model HZB-15NB.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
28-Apr-2024	Jesse Jin	9	ML28	Add new ML28 CICA HOMORE INC and its brand name E-MACHT, with its model ET97005, corresponding to basic model HZB-20AN.
2404B1479SHA	Kent Zhang			
19-Jun-2024	Jesse Jin	9	ML7	Add new models for ML7. EFIC255-WHITE-CC, EFIC255-GREY_MX, corresponding to basic model HZB-20CN; EFIC220-BLACK-6COM, EFIC220-GREY-6COM, EFIC220-NAVY-6COM, EFIC220-followed by up to fifteen letters, corresponding to basic model HZB-15EN; EFIC228_AMZ, EFIC228-followed by up to fifteen letters, EFIC2400, EFIC2400-followed by up to fifteen letters, corresponding to basic model HZB-15NB.
2406B1639SHA	Kent Zhang			
25-Jun-2024	Jesse Jin	9	ML29	Add new ML29 ADVWIN TRADING PTY LTD and its brand name ADVWIN, with its models US1403020,US1403010,US1403030,US14030320,US14030510,US14020110,US14020120,US14020130,US14020140,US14020150,US14020160,US14020170,US14020180,US14020190,US14020210,US14020220,US14020230,US14020240,US14020250,US14020260,US14020270,US1402028,US14020290,US14020310,US14020320,US14020330,US14020340,US14020350,US14020360,US14020370,US14020380,US14020390,US14020410,US14020420,US14020430,US14020440,US14020450,US14020460,US14020470,US14020480,US14020490,US14020510,US14020520,US14020530,US14020540,US14020550,US14020560,US14020570,US14020580, respectively corresponding to basic models HZB-15NB/S,HZB-20BN,HZB-20AN,HZB-20EN,HZB-12E,HZB-12EH,HZB-30D,HZB-18N,HZB-20N,HZB-22N,HZB-25N,HZB-18AN,HZB-22AN,HZB-25AN,HZB-18BN,HZB-22BN,HZB-25BN,HZB-18CN,HZB-20CN,HZB-22CN,HZB-25CN,HZB-12N,HZB-15N,HZB-17N,HZB-12NA,HZB-15NA,HZB-17NA,HZB-12NB,HZB-15NB,HZB-17NB,HZB-12N/S,HZB-15N/S,HZB-17N/S,HZB-12NA/S,HZB-15NA/S,HZB-17NA/S,HZB-12NB/S,HZB-17NB/S,HZB-20DN,HZB-25DN,HZB-15EN,HZB-15EN-W,HZB-15N-W,HZB-15N/S-W,HZB-15NA-W,HZB-15NA/S-W,HZB-15NB-W,HZB-15NB/S-W,HZB-20EN-W.
2406B1909SHA	Kent Zhang			
5-Jul-2024	Jesse Jin	3	4.3ap	Add photo for alternative front view for HZB-20EN.
2406B2061SHA	Kent Zhang	3	4.17d	Add photo for alternative Main control PCB for all models.
		3	4.20n	Add photo for alternative control panel PCB view(front and rear) for HZB-15EN and HZB-20EN series.
		4	16, 4.14	Add alternative Relay, model Y3F-SS-112DM, YX202-S-112DMF.
		4	17, 4.15	Add alternative Across-the-line Capacitor, model MKP.
		4	25, 4.18	Add alternative Optical Isolators, model QX3021 series.
		4	26, 4.19	Add alternative Y capacitor, model YO series, CD series.

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
15-Jul-2024	Jesse Jin	9	ML19	Add new models IM-NS451A, IM-NS451B, IM-NS451C, IM-NS451D, IM-NS451G, IM-NS451H, IM-NS452A, IM-NS452B, IM-NS452C, IM-NS452D, IM-NS452G, IM-NS452H, IM-NS462A, IM-NS462B, IM-NS462C, IM-NS462D, IM-NS462G, IM-NS462H for ML19, corresponding to basic model HZB-20EN.
2407B1013SHA	Kent Zhang			
23-Jul-2024	Jesse Jin	9	ML19	Modify the address of ML19 from "1204, Unit 3, Building C, Fu Cui Yuan, Fu Cui Road, Fu Cui Community, Xixiang Street, Baoan District, Shenzhen, Guangdong 518101" to "1204, Unit 3, Building C, Fu Gui Yuan, Fu Gui Road, Fu Hua Community, Xixiang Street, Baoan District, Shenzhen"
2407B1013SHA	Kent Zhang			
11-Sep-2024	Jesse Jin	7	1-1I, 1AA-1AE	Delete Markings.
2409B0004SHA	Kent Zhang	9	ML7	Add new models for ML7, EFIC201-BLACK, EFIC201- followed by up to fifteen letters corresponding to basic model HZB-15EN; EFIC239-B-SSBLACK_AMZ corresponding to basic model HZB-15NB.
24-Sep-2024	Jesse Jin	9	ML13	Add new models for ML13, SLIM17C-BD, SLIM17B-BD, SLIM17S-BD, SLIM17R-BD, SLIM17G1-BD, SLIM17-BD, SLIM17B1-BD, SLIM17G-BD, SLIM17W-BD, SLIM17G2-BD, SLIM17S1-BD, SLIM24C-BD, SLIM24B-BD, SLIM24S-BD, SLIM24R-BD, SLIM24G1-BD, SLIM24BU-BD, SLIM24G-BD, SLIM24W-BD, SLIM24G2-BD, SLIM24S1-BD, SLIM24C-WF, SLIM24B-WF, SLIM24S-WF, SLIM24R-WF, SLIM24G1-WF, SLIM24BU-WF, SLIM24G-WF, SLIM24W-WF, SLIM24G2-WF, SLIM24S1-WF, corresponding to basic model HZB-15N; SLIM17T-BD, SLIM17TC-BD, SLIM17TB-BD, SLIM17TS-BD, SLIM17TR-BD, SLIM17TG1-BD, SLIM17TS1-BD, SLIM17TB1-BD, SLIM17TG-BD, SLIM17TW-BD, SLIM17TG2-BD, SLIM24-BD, SLIM24TC-BD, SLIM24TB-BD, SLIM24TS-BD, SLIM24TR-BD, SLIM24TG1-BD, SLIM24TS1-BD, SLIM24TBU-BD, SLIM24TG-BD, SLIM24TW-BD, SLIM24TG2-BD, SLIM24-WF, SLIM24TC-WF, SLIM24TB-WF, SLIM24TS-WF, SLIM24TR-WF, SLIM24TG1-WF, SLIM24TS1-WF, SLIM24TBU-WF, SLIM24TG-WF, SLIM24TW-WF, SLIM24TG2-WF, corresponding to basic model HZB-15N/S; SLIM32, SLIM32T, SLIM32TB, SLIM32-WF, SLIM32T-WF, SLIM32TB-WF, SLIM32-BD, SLIM32T-BD, SLIM32TB-BD, corresponding to basic mode HZB-20EN; SLIM36, SLIM36B, SLIM36-BD, SLIM36B-BD, corresponding to basic model HZB-15NB; SLIM36T, SLIM36TB, SLIM36T-BD, SLIM36TB-BD, corresponding to basic model HZB-15NB/S.
2409B1855SHA	kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
8-Oct-2024	Jesse Jin	3	4.23	Add photos for alternative Ice pushing motor.
2409B0154SHA	Kent Zhang	4	4.24c	Add Ice pushing motor, model RY-CJY-616330-0008L manufactured by NINGBO HICON.
		5	4.24c	Add CEC Comps for Ice pushing motor RY-CJY-616330-0008L.
		8	-	Update the Test Summary.
		9	ML30	Add new ML30 VIVOHOME INC. and its brand name VIVOHOME, with its models VH1577-BK, VH1577-SL, VH1577-followed by up to ten letters, the undefined letters indicate color, corresponding to basic model HZB-15NB/S; VH1575, VH1575-followed by up to ten letters, the undefined letters indicate color, corresponding to basic model HZB-20EN; VH1180-SL, VH1180-BK, VH1180-followed by up to ten letters, the undefined letters indicate color, corresponding to basic model HZB-20BN; VH1211, VH1211-BK, VH1211-followed by up to ten letters, the undefined letters indicate color, corresponding to basic model HZB-15N/S.
		9	ML18	Delete ML18 SINOWELL SHANGHAI CO LTD and its brand name VIVOHOME, with its model VH1180-followed by up to ten letters, the undefined letters indicate color.
14-Nov-2024	Jesse Jin	9	ML31	Add new ML31 Canadian Tire Corporation, Limited and its brand name Vida by Paderno, with its models HH-1011424, 043-1568-2, corresponding to basic model HZB-15N/S.
2411B1235SHA	Kent Zhang			
25-Nov-2024	Jesse Jin	9	ML22	Add new models for ML22, IM002-NSI corresponding to basic mode HZB-15N/S; IM002-NBL corresponding to basic model HZB-15N; IM013-N corresponding to basic model HZB-15NB/S; IM015-N, IM-16S corresponding to basic model HZB-20EN; IM017-N corresponding to basic model HZB-15EN.
2411B1406SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
24-Dec-2024	Jesse Jin	9	ML32	Add new ML32 Boost Doctors LLC and its brand name COMMODORE, with its model CMNIM-01B, corresponding to basic model HZB-15NA.
2412B1432SHA	Kent Zhang	9	ML12	Delete ML12 NINGBO UNISUN TRADE CO.,LTD and its brand name BETELNUT, ACIPENSER, OUTGAVA, with its models HZB-12D, HZB-12E, HZB-12EH, HZB-30D, HZB-18N, HZB-20N, HZB-22N, HZB-25N, HZB-18AN, HZB-20AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-20BN, HZB-22BN, HZB-25BN.
		9	ML14	Delete ML14 GuangDong Well Done Trading Co.,Ltd and its brand name HUMHOLD, with its models HDZB-12K1, HDZB-12K2, HDZB-20B1, HDZB-20B2, HDZB-20B3, HDZB-12B1, HDZB-12C1, HDZB-12C2, HDZB-12D1, HDZB-12D2, HDZB-15B1, HDZB-15B2, HDZB-15C1, HDZB-15C2, HDZB-15D1, HDZB-15D2, HDZB-20C1, HDZB-20D1.
		9	ML15	Delete ML15 FOSHAN QINGTING TECHNOLOGY CO.,LTD and its brand name OSCEVIA, with its model OS-20BN, OS-12E, OS-12EH, OS-30D, OS-18N, OS-20N, OS-22N, OS-25N, OS-18AN, OS-20AN, OS-22AN, OS-25AN, OS-18BN, OS-22BN, OS-25BN.
		9	ML24	Delete ML24 NANTEX & NORTHFIELD TRADING COMPANY. LTD. and its brand name Wolmds, with its model HZB-15N/S.
2-Jan-2025	Jesse Jin	9	ML31	Modify ML31 from "Canadian Tire Corporation, Limited" & "3602 W Sample Street, South Bend, IN 46619" to "TRILEAF DISTRIBUTION TRIFEUIL" & "M4S 2B8, TORONTO". Modify the ML model from "HH-1011424" to "HH1011424".
2412B2060SHA	Kent Zhang			
16-Jan-2025	Jesse Jin	3	4.17e,4.17f	Add photos for Alternative Main control PCB for all models.
2501B1056SHA	Kent Zhang	4	4.9	Add alternative water pump, model PA1.
		9	ML33	Add new ML33 SHANGHAI SISHUN ELECTRONIC COMMERCE CO., LTD and its brand name VEVOR, with its model HZB-15N/S, corresponding to basic model HZB-15N/S.
14-Apr-2025	Jesse Jin	9	ML34	Add new ML34 ERIVESS TRADING, INC. and its brand name ERIVESS, with its model NBYG-HA304*, corresponding to basic model HZB-15NB/S.
2504B0955SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
12-Jun-2025	Jesse Jin	1	-	Update the UL standard from "UL 563:2009 Ed.8+R:26May2021" to "UL 60335-2-24:2022 Ed.3+R:29Feb2024 & UL 60335-1:2016 Ed.6". Update the CSA standard from "(R2018)[CSA C22.2#120:2013 Ed.4]" to "CSA C22.2#60335-2-24:2022 Ed.3+U1 & CSA C22.2#60335-1:2016 Ed.2".
2505B1488SHA	Kent Zhang	2	-	Delete models HZB-18N, HZB-22N, HZB-25N, HZB-18AN, HZB-22AN, HZB-25AN, HZB-18BN, HZB-22BN, HZB-25BN, HZB-18CN, HZB-22CN, HZB-25CN, HZB-17N, HZB-17NA, HZB-17NB, HZB-17N/S, HZB-17NA/S, HZB-17NB/S.
		2	-	Add new model HZB-15NF, HZB-15NF-W, HZBY-12 and its model similarity and ratings.
		3	2.17-2.28	Add photos for new models.
		3	4.3aq-4.3as, 4.10q	Add photos for new models.
		4	9	Add alternative ice-dispelling motor, model 50KTYZ.
		4	11	Add alternative water pump, model PA1, PV7, PA1, PV7
		4	16, 4.14	Add alternative Relay, model GK3FF-12VDC-S-A.
		4	25, 4.18	Add alternative Optical isolators, model QX2021 series, HK3021 series.
		4	27b	Add switching transformer for HZBY-12.
		4	28	Delete compressor, model L30H5L. Add alternative compressor, HD48Y11A.
		4	4.13	Add alternative compressor, HD48Y11A.
		5	9	Add CEC comps for 50KTYZ.
		8	-	Update the Test Summary.
25-Jun-2025	Jesse Jin	2	-	Add new brand name Electactic, ZAFRO, WAA, Auseo.
2506B1384SHA	Kent Zhang			
1-Jul-2025	Jesse Jin	9	ML7	Add new models for ML7, EFIC214-BLACK, EFIC214-GREY, EFIC214-RED, EFIC214-SS followed by up to fifteen letters, corresponding to basic model HZB-15N/S; EFIC226-BLACK, EFIC226-WHITE, EFIC226- followed by up to fifteen letters, corresponding to basic model HZB-15NA.
2507B0030SHA	Kent Zhang			
23-Jul-2025	Kevin Zhang / Rancho Ke	9	ML22	Add new models for ML22, IM023-N, IM023-NBL-USEH, IM023-NBL-USZX, IM023-NBL-CAEH, IM023-NBL-CAZX, IM023-N1BL-USEH, IM023-N1BL-USZX, IM023-N1BL-CAEH, IM023-N1BL-CAZX, corresponding to basic model HZB-15NF, IM015-NBL-USEH, IM015-NBL-USZX, IM015-NBL-CAEH, IM015-NBL-CAZX, corresponding to basic model HZB-20EN, IM017-NBL-USEH, IM017-NBL-USZX, IM017-NBL-CAEH, IM017-NBL-CAZX, corresponding to basic model HZB-15EN, IM027-N, IM027-NBS-USEH, IM027-NBS-USZX, IM027-NBS-CAEH, IM027-NBS-CAZX, corresponding to basic model HZB-20DN.
2507B1779SHA	Kent Zhang			

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
8-Aug-2025	Kevin Zhang / Rancho Ke	9	ML7	Add new models for ML7, EFIC1866-BLACK, EFIC1866-followed by up to fifteen letters corresponding to basic model HZB-15N, EFIC226-RED corresponding to basic model HZB-15NA.
2508B0342SHA	Kent Zhang			
25-Aug-2025	Kevin Zhang / Rancho Ke	9	ML11	Add new model NIM044BSN2 for ML11, corresponding to basic model HZB-20EN.
2508B1926SHA	Kent Zhang			
3-Sep-2025	Kevin Zhang / Rancho Ke	9	ML7	Add new models for ML7, EFIC2550, EFIC2550-followed by up to fifteen letters corresponding to basic model HZB-15NB/S.
2508B2002SHA	Kent Zhang	9	ML11	Delete ML11 NewAir LLC, and its brand name NewAir with its models NIM044BS00, NIM044BS01, NIM044SS00, NIM026MBN0, NIM026SSN0, NIM044BSN2.
21-Oct-2025	Rancho Ke	9	ML7	Add new models for ML7, EFIC144-SS, EFIC144-SSBLACK, EFIC144-SSRED, EFIC144-followed by up to fifteen letters, corresponding to basic model HZB-15NG/S.
2510B0957SHA	Kent Zhang			
23-Oct-2025	Rancho Ke	2	-	Add new models HZB-15NH, HZB-15NH/S, HZB-15NG, HZB-15NG/S, HZB-15NG-W, HZB-15NG/S-W, HZB-15NH-W, HZB-15NH/S-W, HZB-15DN, HZB-15DN-W, its Model Similarity and Ratings.
2509B0450SHA			-	Add ratings for HZB-20DN with new compressor QD32R11
	Kent Zhang		-	Revise rated ice making current for models HZB-12N, HZB-15N, HZB-15N-W, HZB-12NA, HZB-15NA, HZB-15NA-W, HZB-12NB, HZB-15NB, HZB-15NB-W, HZB-12N/S, HZB-15N/S, HZB-15N/S-W, HZB-12NA/S, HZB-15NA/S, HZB-15NA/S-W, HZB-12NB/S, HZB-15NB/S, HZB-15NB/S-W, HZB-15EN, HZB-15EN-W, HZB-15NF, HZB-15NF-W from "2.7A" to "2.7A (with AC ice pushing motor), 1.8A (with DC ice pushing motor)"
		3	4.3aa1 to 4.3aa13	Add photos for new model (appearance)
			4.10r1 to 4.10r11	Add photos for new model (internal)
			4.16d, 4.16e	Add photos for new model (Main control PCB)
			4.17g, 4.17h	Add photos for Alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) (Main control PCB)
			4.20p, 4.20q	Add photos for new model HZB-15DN, HZB-15DN-W (Control panel PCB view for HZB-15DN, HZB-15DN-W)
			4.16, 4.17	Delete two photos
			4.16a, 4.16b, 4.16c, 4.17a to 4.17f	Add a note to exclude the model HZB-15DN
			4.24	Add a photo "Ice pushing motor view for HZB-15DN and HZB-15N* series (*=blank or letter A,B,F,H,G)"
		4	9	Revise the technical data from "T.P" to "Z.P".

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		4	14	Revise the technical data from "300V, 80°C" to "600V, Min. 80°C" for internal wire 1015.
			16	Add an alternative relay model SED-SS-112DM
			26	Update the technical data from "1 piece" to "1 or 2 pieces"
			27, 27a, 27b	Include a reference to associate with illustration in section 7.
			29	Add model HZBY-12 into the desceiption.
			4.2	Add photo No. 4.3aa2, 4.3aa9. Revise the technical data from "4*18AWG, 1.8-3m" to "3*18AWG, 1.5-3m".
			4.3	Add photo No. 4.3aa1, 4.3aa6, 4.3aa13.
			4.5	Add photo No. 4.10r3, revise the technical data from "105°C" to "Min. 80°C" for internal wire 1015.
			4.6, 4.10	Add photo No. 4.10r2.
			4.7	Add photo No. 4.10r5.
			4.11	Add photo No. 4.10r4.
			4.12b	Add technical data "OD48mm, ID37mm, tube thickness 1.0mm".
			4.14	Add photo No. 4.16d. Add UL file No. "E314517" for XIAMEN HONGFA. Add an alternative relay model SED-SS-112DM.
			4.15	Add photo No. 4.16d. Add technical data "0.33μF,0.56μF".
			4.16, 4.17, 4.21	Add photo No. 4.16d.
			4.18	Delete item 4.18 "Optical Isolators" due to deletion of photo 4.16, 4.17.
			4.19	Add photo No. 4.16d. Add technical data "4.7nF". Update the technical data from "1 piece" to "1 or 2 pieces"
			4.20	Add pto No. 4.16d, delete the first transformer. Change the manufacturer and type of the second transformer to "Various", delete "without optical isolater as feedback" in the technical data, include a reference to associate with illustration in section 7. Add an alternative transformer.
			4.25	Add an alternative ice pushing motor model YS-BL-58-1100T for HZB-15N series models.
			4.26, 4.27	Add ice-dispensing Motor and relay for Ice-dispensing Motor for HZB-15DN.
			-	Revise note 4.
		5	4.8	Revise information from "wire size 0.47mm, 7.51Ω at 22°C" to "wire size 0.51mm, 6.5Ω at 25°C".
		6	13	Add information of critical feature for transformer.
		7	4a, 4b, 4c, 4d, 4d1, 4e, 4e1, 4f, 4f1	Add illustration 4a, 4b, 4c, 4d, 4d1, 4e, 4e1, 4f, 4f1 - Spefication for transformer.
		8	-	Update Test Summary.
		11	11.1	Add Dielectric Voltage Withstand Test for transformer.

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
29-Oct-2025	Rancho Ke	9	ML7	Add new models for ML7, EFIC232-BLACK, EFIC232-WHITE, EFIC232-followed by up to fifteen letters, corresponding to basic model HZB-15DN.
2510B1152SHA	Kent Zhang		ML35	Add new ML35 CyberChill Limited, with its brand name cyberchill and its models IM-NS452C, IM-NS453A, IM-NS453C, IM-NS453D, IM-NS463A, IM-NS463C, IM-NS463D, corresponding to basic model HZB-20EN.
18-Nov-2025	Rancho Ke	9	ML7	Add new models for ML7, EFIC2406-SS, EFIC2406-SSBLACK, EFIC2406-SSRED, EFIC2406-followed by up to fifteen letters, corresponding to basic model HZB-15NH/S.
2511B1064SHA	Kent Zhang		ML17	Remove Multiple Listee No. 17 HSNi LLC with its brand name IMPROVEMENTS and model 829058.
			ML20	Remove Multiple Listee No. 20 Comin International Inc. with its brand name FUTURE HOME and models KF0103-12D, KF0103-12E, KF0103-12EH, KF0103-30D, KF0103-18N, KF0103-20N, KF0103-22N, KF0103-25N, KF0103-18AN, KF0103-20AN, KF0103-22AN, KF0103-25AN, KF0103-18BN, KF0103-20BN, KF0103-22BN, KF0103-25BN, KF0103-18CN, KF0103-20CN, KF0103-22CN, KF0103-25CN, KF0103-12N, KF0103-15N, KF0103-17N, KF0103-12NA, KF0103-15NA, KF0103-17NA, KF0103-12NB, KF0103-15NB, KF0103-17NB, KF0103-12NS, KF0103, KF0103-17NS, KF0103-12NAS, KF0103-15NAS, KF0103-17NAS, KF0103-12NBS, KF0103-15NBS, KF0103-17NBS, KF0103-20DN, KF0103-25DN.
			ML21	Remove Multiple Listee No. 21 Shanghai Hotel Equipment Corp. with its brand name HECMAC and models HZB-12DC, HZB-12EC, HZB-12EHC, HZB-30DC, HZB-18NC, HZB-20NC, HZB-22NC, HZB-25NC, HZB-18BNC, HZB-20BNC, HZB-22BNC, HZB-25BNC, HZB-18CNC, HZB-20CNC, HZB-22CNC, HZB-25CNC, HZB-12NC, HZB-15NC, HZB-17NC, HZB-12NAC, HZB-15NAC, HZB-17NAC, HZB-12NBC, HZB-15NBC, HZB-17NBC, HZB-12N/SC, HZB-15N/SC, HZB-17N/SC, HZB-12NB/SC, HZB-15NB/SC, HZB-17NB/SC, HZB-20DNC, HZB-25DNC.
			ML26	Remove Multiple Listee No. 26 SHAOXING PROCCHIO TEXTILE CO., LTD with its brand name POBWAM and models HZLS-15NS, HZLS-12D, HZLS-12E, HZLS-12EH, HZLS-30D, HZLS-18N, HZLS-20N, HZLS-22N, HZLS-25N, HZLS-18AN, HZLS-20AN, HZLS-22AN, HZLS-25AN, HZLS-18BN, HZLS-20BN, HZLS-22BN, HZLS-25BN, HZLS-18CN, HZLS-20CN, HZLS-22CN, HZLS-25CN, HZLS-12N, HZLS-15N, HZLS-17N, HZLS-12NA, HZLS-15NA, HZLS-17NA, HZLS-12NB, HZLS-15NB, HZLS-17NB, HZLS-12NS, HZLS-17NS, HZLS-12NAS, HZLS-15NAS, HZLS-17NAS, HZLS-12NBS, HZLS-15NBS, HZLS-17NBS, HZLS-20DN, HZLS-25DN.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
12-Dec-2025	Rancho Ke	9	ML7	Add new models for ML7, EFIC247-BLACK, EFIC247-followed by up to fifteen letters corresponding to basic model HZBY-12, FGIC4400-SS, FGIC4400-followed by up to fifteen letters corresponding to basic model HZB-12NB/S.
2512B0737SHA	Kent Zhang		ML9	Remove ML9 Mohawk Group Inc with its brand name hOme and models HME010504N, HME010694N.
			ML16	Remove ML16 BEACH TRADING COMPANY INC. with its brand name DECO CHEF and models DGIM44NGBLK, DGIM44NGSTS, DG26NIMSTS, DG26NIMRED, DGADIMN01.
			ML8	Remove ML8 BOBBY'S DIRECT LLC with its brand name ArticPRO and model 21380.
			ML27	Remove ML27 Shanghai Qianjing Technology Co., LTD with its brand name Habitio and models IM-N11, IM-N11P, IM-N11S, IM-N12, IM-N12P, IM-N12S.
15-Jan-2026	Rancho Ke	2	-	Add a new model HZB-20FN, its Model Similarity and Ratings.
2512B0277SHA		3	4.3ah1, 4.3ah2	Add photo of front view for HZB-15NB/S (alternative).
	Kent Zhang		4.3ah3 ~ 4.3ah6	Add photo of appearance view for HZB-15NB.
			4.3aj2	Add photo of alternative front view for HZB-15EN and HZB-20EN
			4.3aa3a, 4.3aa3b	Add photo of alternative appearance for HZB-15DN.
			4.3aa14 ~ 4.3aa21	Add photo of alternative appearance for HZB-15NH.
			4.3ap1 ~ 4.3ap6, 4.10i1 ~ 4.10i9, 4.20r, 4.20s	Add photo of new model HZB-20FN.
			4.17g, 4.17h	Add a note to exclude the model HZB-15DN.
			4.17i, 4.17j	Add an alternative Main control PCB for HZB-15N* series (*=blank or letter A,B,F,H,G) except for HZB-15DN and HZB-20*N series (*=blank or letter A, B, C, D, E, F)
		4	4.22	Add five alternative self-priming water pumps type JZ370L-9-1, JZ370L-9-2, S370D5-LP, S370D7-LP, S370D9-LP.
			4.25	Add model HZB-20*N series (*=blank or letter A, B, C, D, E, F) into the description.
			4.27	Add an alternative relay model GK32F-12VDC-D-S-A.
		8	-	Add a new test block.

The following changes are in compliance with the declaration of Section 8.1:

ED 16.3.15 (1-Jul-2022) Mandatory