



HEBEI NANFENG AUTOMOBILE EQUIPMENT (GROUP) CO., LTD
BEIJING GOLDEN NANFENG INTERNATIONAL TRADING CO., LTD

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Company Profile

Hebei Nanfeng Automobile Equipment (Group) Co., Ltd was established in 1993, which is a group company with 6 factories. We are the biggest vehicle heating & cooling system manufacturer in China and the designated supplier of Chinese military vehicles. Our main products are high voltage coolant heater, electronic water pump, plate heat exchanger, parking heater, parking air conditioner, etc.

Our factory's production units are equipped with high tech machineries, strict quality control testing devices and a team of professional technicians and engineers endorsing the quality and authenticity of our products.

In 2006, our company has passed ISO/TS16949:2002 quality management system certification. We also bagged the CE certificate and Emark certificate making us amongst the only few companies in the world acquiring such high level certifications. Currently being the largest stakeholders in China, we hold a domestic market share of 40% and then we export them around the globe particularly in Asia, Europe and Americas.

Meeting the standards and demands of our customers have always been our top priority. It always encourages our experts to continuously brain storm, innovate, design and manufacture new products, impeccably suitable for the Chinese market and our customers from every nook of the world.



Intelligent Production Line



Test Equipment



Temp/Humid/Vibration Chamber



Box Dust Test Chamber/
Box Rain Test Chamber



Air Tightness Detector



Salt Spray Test Chamber



High and Low Temperature Shock
Test Chamber



EMC Labs



Electronic Water Pump Test System



Automatic Motor Tester

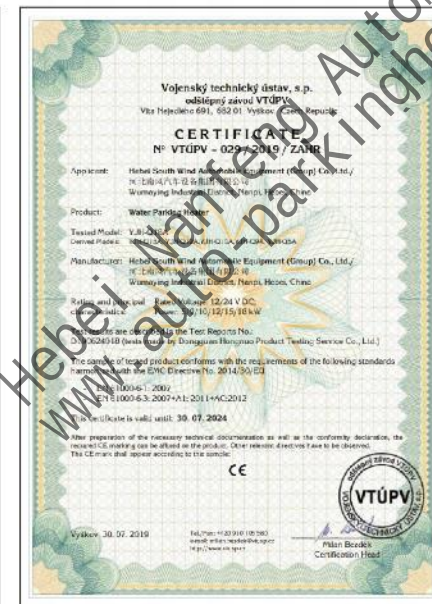


AOI Optical Tester



Automatic Test Equipment

Certificate



Cooperation Partner



Selection catalogue of high voltage coolant heater

Main model	Product outline drawing	Rated power	Sub model	RV/V	HV/V	LV/V	Control signal
SH-05		5KW@60℃, 10L/min	SH05-1	350	250-450	9-32	CAN2.0B
			SH05-2	600	450-750		CAN2.0B
NF-WPTC01		6KW±10%@10L/min Tin=0℃	WPTC01-1	350	250-450	9-16 or 18-32	CAN
			WPTC01-1	600	450-750		CAN
NF-WPTC02		6KW±10%@10L/min Tin=0℃	WPTC02-1	350	250-450	9-16 or 18-32	CAN
			WPTC02-2	600	450-750		CAN
NF-WPTC03		7KW±10%@10L/min Tin=0℃	WPTC03-1	330	200-400	18-32	CAN
NF-WPTC04		3.5KW±10%@10L/min Tin=0℃	WPTC04-1	280	240-400	12	Vehicle relay control
NF-WPTC05		6KW±10%@10L/min Tin=0℃	WPTC05-1	380	300-450	12	Vehicle relay control
NF-WPTC06		10KW±10%@20L/min Tin=0℃	WPTC06-1	400	295-475	9-16	CAN
NF-WPTC07		8KW±10%@10L/min Tin=0℃	WPTC07-1	350	250-450	9-16 or 18-32	CAN
			WPTC07-2	600	450-750	9-16 or 18-32	CAN

Main model	Product outline drawing	Rated power	Sub model	RV/V	HV/V	LV/V	Control signal
NF-WPTC08		6.5KW±10%@10L/min Tin=65℃	WPTC08-1	614	500-710	18-32	CAN
NF-WPTC09		3KW±10%@12L/min Tin=-20℃	WPTC09-1	355	260-420	9-16	CAN
		1.2KW±10%@10L/min Tin=0℃	WPTC09-2	48	36-90	18-32	CAN
NF-WPTC10		2.5KW±10%@25L/min Tin=40℃	WPTC10-1	AC220	175-276	18-32	Relay control
NF-WPTC11		2.6KW±10%@10L/min Tin=0℃	WPTC11-1	360	280-420	18-32	Vehicle relay control
NF-WPTC12		6.5KW±10%@10L/min Tin=60℃	WPTC12-1	350	250-470	9-16	CAN
NF-WPTC13		8KW±10%@50L/min Tin=40℃	WPTC13-1	AC430	323-552	12	Relay control
W-08		5KW@Tin60℃	W08-1	350	250-500	9-16 Or 16-32	CAN2.0B LIN2.1
W-09		7KW@Tin60℃	W09-1	350	250-500	9-16 Or 16-32	CAN2.0B LIN2.1
			W09-2	600	400-750	9-16 Or 16-32	CAN2.0B LIN2.1
W-04		7KW@Tin40℃	W04-1	600	400-750	9-16 Or 16-32	CAN2.0B
			W04-2	600	400-750	NTC + temperature control switch	Without integrated control
			W04-3	350	250-500	9-16 Or 16-32	CAN2.0B

Main model	Product outline drawing	Rated power	Sub model	RV/V	HV/V	LV/V	Control signal
W-01		14KW@ Tin20℃	W01-3	600	450-750	16-32	CAN2.0B
W-13		8KW@ Tin60℃	W13-1	350	250-500	9-16 Or 16-32	CAN2.0B
		8KW@ Tin60℃	W13-2	600	400-750	9-16 Or 16-32	CAN2.0B
		7KW@ Tin60℃	W13-3	800	600-950	9-16 Or 16-32	CAN2.0B
W-15		24KW@ Tin40℃ high voltage 4PIN socket	W15-1	600	400-750	16-32	CAN2.0B
		24KW@ Tin40℃ high voltage 2PIN socket	W15-2	600	400-750	16-32	CAN2.0B
W-20		6KW@ Tin60℃	W20-1	350	250-500	9-16 Or 16-32	CAN2.0B LIN2.1
		6KW@ Tin60℃	W20-2	600	400-750	9-16 Or 16-32	CAN2.0B LIN2.1
		5KW@ Tin60℃	W20-3	800	600-950	9-16 Or 16-32	CAN2.0B LIN2.1
HVH-Q20		10KW@Tin 20℃	HVH-Q10	600	450-750	9-16 Or 16-32	Rocker switch hardwire control
		15KW@Tin 20℃	HVH-Q15	600	450-750	9-16 Or 16-32	
		20KW@Tin 20℃	HVH-Q20	600	450-750	9-16 Or 16-32	
HVH-Q series		30KW @Tin 20℃ (OEM 15KW-30KW)	HVH-Q 15~30	600	450-750	9-16 or 18-32	CAN2.0B
HVH-A series		18KW@50L/min Tin=40℃ (OEM 10KW-18KW)	HVH-A 10~18	600	400-900	16-36	CAN
HVH-K series		12KW@50L/min Tin=40℃ (OEM 8KW-12KW)	HVH-K 8~12	600	400-900	16-36	CAN

SH-05



- Overall dimension (L*W * H): 187.1*159.3*105mm
- Installation dimension: 33*33*105 six screw mounting holes
- Joint dimension: $\phi 20\text{mm}$
- Electrical interface: Holder connector
- High voltage connector model: 805-972-021
- Low voltage connector Model: 805-031-551

Model	SH05-1	SH05-2
Medium temperature	-40℃~90℃	-40℃~90℃
Medium type	Water: ethylene glycol /50:50	Water: ethylene glycol /50:50
Power/KW	5KW@60℃, 10L/min	5KW@60℃, 10L/min
Burst pressure	5bar	5bar
Rated voltage/VDC	350	600
Communication protocol	CAN	CAN
Connector IP level (high and low voltage)	IP67	IP67
High voltage working voltage/V (DC)	250-450	450-750
Low voltage operating voltage/V (DC)	9-32	9-32

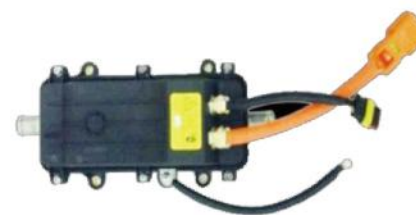
NF-WPTC01



- Overall dimension (L* W*H): 232.3 * 98.3 * 97mm
- Installation dimension: 144 (128) * 119mm
- Joint dimension : $\phi 25, \phi 20\text{mm}$
- Electrical interface: Holder connector
- High voltage connector model: PL082X-6.1-2.5, PL082X-6.1-4 (Amphenol)
: C10514N1-04-1-2 (JonHon)
- Low voltage connector Model: A02-ECC320Q60A1-LVC-4 (A)
(Sumitomo adaptive drive module)

Model	WPTC01-1	WPTC01-2
Rated voltage (V)	350	600
Voltage range (V)	250-450	450-750
Rated power (W)	6000±10%@10L/min, Tin=0℃	6000±10%@10L/min, Tin=0℃
Controller low voltage (V)	9-16 or 18-32	9-16 or 18-32
Control signal	CAN	CAN

NF-WPTC02



- Overall dimension (L* W* H): 232.3 * 98.3 * 97mm
- Installation dimension: 144 (128) * 119mm
- Joint dimension: $\phi 25, \phi 20\text{mm}$
- Electrical interface: Wire connector
- High voltage connector model: C10514N1-02-6-1 (JonHon)
- Low voltage connector Model: 282106-1 (TE)

Model	WPTC02-1	WPTC02-2
Rated voltage (V)	350	600
Voltage range (V)	250-450	450-750
Rated power (W)	6000±10%@10L/min, Tn=0℃	6000±10%@10L/min, Tin=0℃
Controller low voltage (V)	9-16 or 18-32	9-16 or 18-32
Control signal	CAN	CAN

NF-WPTC03



- Overall dimension (L* W* H): 236 * 147 * 110mm
- Installation dimension: 154 (104) * 165mm
- Joint dimension: $\phi 20\text{mm}$
- Electrical interface: Holder connector
- High voltage connector model: HVC2P28MV104 (Amphenol)
- Low voltage connector Model: A02-ECC320Q60A1-LVC-4 (A)
(Sumitomo adaptive drive module)

Model	WPTC03-1
Rated voltage (V)	330
Voltage range (V)	200-400
Rated power (W)	7000±10%@10L/min, Tin=0℃
Controller low voltage (V)	18-32
Control signal	CAN

NF-WPTC04



- Overall dimension (L* W* H): 216.4 * 100 * 57mm
- Installation dimension: 193.4 * 68mm
- Joint dimension: $\phi 16$ mm
- Electrical interface: Holder connector
- High voltage connector model: HVIL-F3P (16A) -A-1 (JonHon)
- Low voltage connector Model: PB621-04020 (KUM)

Model	WPTC04-1
Rated voltage (V)	280
Voltage range (V)	240-400
Rated power (W)	3500 $\pm 10\%$ @10L/min, Tin=0℃
Controller low voltage (V)	12
Control signal	Vehicle relay control

NF-WPTC05



- Overall dimension (L*W*H): 236*147*83mm
- Installation dimension: 154 (104)*165mm
- Joint dimension: Quick Release Coupling
- Electrical Interface :Holder connector
- High voltage connector model: HVIL-F3P(16A)-A-1 (JonHon)
- Low voltage connector model: PB621-04020 (KUM)

Model	WPTC05-1
Rated voltage (V)	380
Voltage range (V)	300~450
Rated power (W)	6000 $\pm 10\%$ @10L/min, Tin=0℃
Controller low voltage (V)	12
Control signal	Vehicle relay control

NF-WPTC06



- Overall dimension (L *W * H): 236 * 147 * 83mm
- Installation dimension: 154 (104) * 165mm
- Joint dimension: $\phi 20$ mm
- Electrical interface: Wire connector
- High voltage connector model: HVC2P28FS204 (Amphenol)
- Low voltage connector model: A02-ECC320Q60A1-LVC-4 (A)
(Sumitomo adaptive drive module)

Model	WPTC06-1
Rated voltage (V)	400
Voltage range (V)	295~475
Rated power (W)	10000 $\pm 10\%$ @20L/min, Tin=0℃
Controller low voltage (V)	9~16
Control signal	CAN

NF-WPTC07



- Overall dimension (L*W*H): 236*147*83mm
- Installation dimension: 154 (104)*165mm
- Joint dimension: $\phi 20$ mm
- Electrical Interface: Holder connector
- High voltage connector model: HVC2P28MV102, HVC2P28MV104 (Amphenol)
- Low voltage connector model: A02-ECC320Q60A1-LVC-4(A)
(Sumitomo adaptive drive module)

Model	WPTC07-1	WPTC07-2
Rated voltage (V)	350	600
Voltage range (V)	250-450	450-750
Rated power (W)	8000 $\pm 10\%$ @10L/min, Tin=0℃	8000 $\pm 10\%$ @10L/min, Tin=0℃
Controller low voltage (V)	9-16 or 18-32	9-16 or 18-32
Control signal	CAN	CAN

NF-WPTC08



- Overall dimension (L*W*H): 251*211*82.5mm
- Installation dimension: 183*160mm
- Joint dimension : $\phi 20$ mm
- Electrical Interface : Holder connector
- High voltage connector model: RT00122PN03 (Amphenol)
- Low voltage connector model: Y2M-7ZJBM (LINGHANG)

Model	WPTC08-1
Rated voltage (V)	614
Voltage range (V)	500-710
Rated power (W)	6500 $\pm 10\%$ @10L/min, Tin=65℃
Controller low voltage (V)	18-32
Control signal	CAN

NF-WPTC09



- Overall dimension (L*W*H): 209.6*123.4*80.7mm
- Installation dimension: 189.6*70mm
- Joint dimension: $\phi 20$ mm
- Electrical Interface : Holder connector
- High voltage connector model: HVC2P28MV102, HVC2P28MV104 (Amphenol)
- Low voltage connector model: A02-ECC320Q60A1-LVC-4(A)
(Sumitomo adaptive drive module)

Model	WPTC09-1	WPTC09-2
Rated voltage (V)	355	48
Voltage range (V)	260-420	36-90
Rated power (W)	3000 $\pm 10\%$ @12/min, Tin=-20℃	1200 $\pm 10\%$ @10L/min, Tin=0℃
Controller low voltage (V)	9-16	18-32
Control signal	CAN	CAN

NF-WPTC10



- Overall dimension (L*W*H): 209.6*123.4*80.7mm
- Installation dimension: 189.6*70mm
- Joint dimension: $\phi 20$ mm
- Electrical interface: Wire connector
- High voltage connector model: ATP06-2S-NFK
- Low voltage connector model: 282080-1 (TE)

Model	WPTC10-1
Rated voltage (V)	220
Voltage range (V)	175-276
Rated power (W)	2500 $\pm 10\%$ @25L/min, Tin=40℃
Controller low voltage (V)	12
Control signal	Relay control

NF-WPTC11



- Overall dimension (L*W*H): 145*95*96.5mm
- Installation dimension: $\phi 16$ mm
- Electrical interface: Wire connector
- High voltage connector model: HVIL-M2S(20A)-M00A-1 G002 (JonHon)
- Low voltage connector model: 174264-2 (TE)

Model	WPTC11-1
Rated voltage (V)	360
Voltage range (V)	280-420
Rated power (W)	2600 $\pm 10\%$ @10L/min, Tin=0℃
Controller low voltage (V)	12
Control signal	Vehicle relay controll

NF-WPTC12



- Overall dimension (L*W*H): 192.7*155*110mm
- Joint dimension: $\phi 20$ mm
- Electrical Interface : Holder connector
- High voltage connector model: HVC2P28MV104 (Amphenol)
- Low-voltage connector model: A02-ECC320Q60A1-LVC-4(A)
(Sumitomo adaptive drive module)

Model	WPTC12-1
Rated voltage (V)	350
Voltage range (V)	250-470
Rated power (W)	$6500 \pm 10\%$ @10L/min, $T_{in}=60^{\circ}\text{C}$
Controller low voltage (V)	9-16
Control signal	CAN

NF-WPTC13



- Overall dimension (L*W*H): 247*197.5*99mm
- Joint dimension: $\phi 25$ mm
- Electrical interface: Wire connector
- High voltage connector model: RTS6BS14N4SHEC (Amphenol)
- Low voltage connector model: 282080 (TE)

Model	WPTC13-1
Rated voltage (V)	430
Voltage range (V)	323-552
Rated power (W)	$8000 \pm 10\%$ @10L/min, $T_{in}=40^{\circ}\text{C}$
Controller low voltage (V)	12
Control signal	Relay control

W08



- Overall dimension(L*W*H): 145*135*99 mm
- Installation dimension: Six screw mounting holes
- Joint dimension: D20*30 (waterproof ring)
- Electrical interface : Holder connector
- High voltage connector: Amphenol HVC2P28MV104,
Wire harness connector: Amphenol HVC2P28FS104
- Low voltage connector: 320Q60A1-LVC-4 (Haichen A02-ECC),
Wire harness connector: Sumitomo 6189-1083

Item	W08-1	W08-2
Rated voltage(VDC)	350	600
Working voltage(VDC)	250-450	450-750
Rated power(KW)	$5(1 \pm 10\%)$ @10L/min, $T_{in}=60^{\circ}\text{C}$, 350V	$5(1 \pm 10\%)$ @10L/min, $T_{in}=60^{\circ}\text{C}$, 600V
Impulse current(A)	$28.5 \leq$ @450V	$20 \leq$ @750V
Controller low voltage(VDC)	9-16 or 16-32	9-16 or 16-32
	CAN2.0B、LIN2.1	CAN2.0B、LIN2.1
Control model	Gear (3rd gear) or PWM	Gear (3rd gear) or PWM

W09



- Overall dimension(L*W*H): 258.6*200*56mm
- Installation dimension: 185.5*80 four screw mounting holes
- Joint dimension: D19*21 (waterproof ring)
- Electrical interface : Holder connector
- High voltage connector : Amphenol HVC2P28MV104,
Wire harness connector: Amphenol HVC2P28FS104
- Low voltage connector : 320Q60A1-LVC-4 (Haichen A02-ECC),
Wire harness connector: Sumitomo 6189-1083

Item	W09-1	W09-2
Rated voltage(VDC)	350	600
Working voltage(VDC)	250-450	450-750
Rated power(KW)	$7(1 \pm 10\%)$ @10L/min, $T_{in}=60^{\circ}\text{C}$, 350V	$7(1 \pm 10\%)$ @10L/min, $T_{in}=60^{\circ}\text{C}$, 600V
Impulse current(A)	≤ 40 @450V	≤ 25 @750V
Controller low voltage(VDC)	9-16 or 16-32	9-16 or 16-32
Control signal	CAN2.0B、LIN2.1	CAN2.0B、LIN2.1
Control model	Gear (5th gear) or PWM	Gear (5th gear) or PWM

W01



- Overall dimension(L*W*H): 336*170*110.5mm
- Installation dimension: 172*152mm
- Joint dimension : D25*27 (waterproof ring) mm
- Electrical interface: Holder connector
- High voltage connector : HVIL-F2P (40A)-A (JonHon)
- [optional C10514N1-02-3-1 G004]
- Low voltage connector : RT00188SN03 (Amphenol) [optional wire connector structure, AMP6PIN connector 282090-1]

Item	W01
Rated voltage(VDC)	600
Working voltage(VDC)	450-750
Rated power(KW)	14(1±10%)@20L/min, T _{in} 20℃, 600V
Impulse current(A)	≤50@750V
Controller low voltage(VDC)	16-32
Control signal	CAN2.0B
Control model	Gear (3rd gear) or PWM

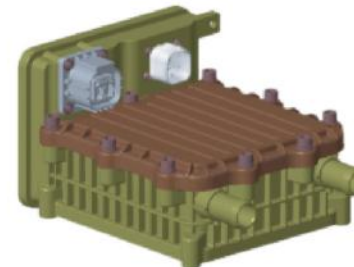
W04



- Overall dimension(L*W*H): 310*144.3*107.5mm
- Installation dimension: 144-128*119
- Joint dimension: D20*22 (waterproof ring) mm
- Electrical interface : Holder connector
- High voltage connector : JonHon C10514N1-02-3-1
- Low voltage connector: 320Q60A1-LVC-4 (Haichen A02-ECC)

Item	W04-1	W04-2(Without controller)	W04-3
Rated voltage(VDC)	600	600	350
Working voltage(VDC)	450-750	450-750	250-450
Rated power(KW)	7(1±10%)@10L/min, T _{in} 40℃, 600V	7(1±10%)@10L/min, T _{in} 40℃, 600V	7(1±10%)@10L/min, T _{in} 40℃, 350V
Impulse current(A)	≤30@750V	≤45@750V	≤45@450V
Controller low voltage(VDC)	9-16 or 16-32	-	9-16 or 16-32
Control model	Gear (3rd gear) or PWM	-	Gear (3rd gear) or PWM
Control signal	CAN2.0B	NTC + temperature control switch	CAN2.0B

W13



- Overall dimension(L*W*H): 214*178*119mm
- Installation dimension: 148.5*145mm
- Joint dimension: D20*D22.4 (waterproof ring) mm
- Electrical interface : Holder connector
- High voltage connector : (1)JonHon EVH2-N2ZJ-SA (2)Tyco EVH2-N2ZJ-SA, Wire harness connector EVH2-N2TK-TDA
- Low voltage connector : Tyco TE 776276-1, Wire harness connector: Tyco TE 776286-1

Item	W13-1	W13-2	W13-3
Rated voltage(VDC)	350	600	800
Working voltage(VDC)	250-500	400-750	600-950
Rated power(KW)	8(1±10%)@12L/min, T _{in} 60℃, 350V	8(1±10%)@12L/min, T _{in} 60℃, 600V	7(1±10%)@12L/min, T _{in} 60℃, 800V
Impulse current(A)	45≤@450V	≤30@750V	≤25@950V
Controller low voltage(VDC)	9-16 or 16-32	9-16 or 16-32	9-16 or 16-32
Control signal	CAN2.0B	CAN2.0B	CAN2.0B
Control model	Gear (5th gear) or PWM	Gear (7th gear) or PWM	Gear (7th gear) or PWM

W15



- Overall dimension(L*W*H): 421*225.2*126 mm
- Installation dimension: 190*202.6mm, 4-D6.5
- Joint dimension: D25*42 (waterproof ring) mm
- Electrical interface: high voltage: Holder connector, low-voltage :wire connector
- High voltage connector:4PIN: JonHon EVH2-M4JZ-SA; 2PIN: Amphenol HVC2PG36MV210
- Low voltage connector: Tyco 282090-1

Item	W15-1	W15-2
Rated voltage(VDC)	600	600
Working voltage(VDC)	400-750	400-750
Rated power(KW)	24(1±10%)@40L/min, T _{in} 40℃, 600V (2 high voltage circuits, 2*12KW)	24(1±10%)@40L/min, T _{in} 40℃, 600V
Impulse current(A)	70≤@750V	70≤@750V
Controller low voltage(VDC)	16-32	16-32
Control signal	CAN2.0B	CAN2.0B
Control model	Gear 4	Gear 4

W20



- Overall dimension(L*W*H): 181.9*152.4*114.8 mm
- Installation dimension: 115*33mm, 6-M6
- Joint dimension: D20*26 (waterproof ring) mm
- Electrical interface: Holder connector
- High voltage connector : Tyco 2103124-4
(Wire harness connector: 4-2103177-4)
- Low voltage connector :Self-made (Wire harness connector:
Sumitomo Sheath: 6189-7606)

Item	W20-1	W20-2	W20-3
Rated voltage(VDC)	350	600	800
Working voltage(VDC)	250-500	400-750	600-950
Rated power(KW)	6(1±10%)@10L/min T _{in} 60℃, 350V	6(1±10%)@10L/min T _{in} 60℃, 600V	5(1±10%)@10L/min T _{in} 60℃, 800V
Impulse current(A)	50≤@500V	≤30@750V	≤25@950V
Controller low voltage(VDC)	9-16 or 16-32	9-16 or 16-32	9-16 or 16-32
Control signal	CAN2.0B or LIN2.1	CAN2.0B or LIN2.1	CAN2.0B or LIN2.1
Control model	Gear (3 gears) or PWM	Gear (3 gears) or PWM	Gear (3 gears) or PWM

HVH-Q20



- Overall dimension (L*W*H): 314*327*105mm
- Installation dimension: 179*275mm
- Joint dimension: φ25mm
- Working temperature:-40℃~85℃
- Unmarked dimensional tolerance shall comply with GB/T1804-C
- Service medium: coolant, ratio of water to ethylene glycol=50:50
- Heater high voltage plug-in : PL082X-60-6
- High voltage plug-in at high voltage harness end: PL182x-60-6
(provided by bus factory)

Item	HVH-Q20-10KW	HVH-Q20-15KW	HVH-Q20-20KW
Rated voltage(VDC)	600	600	600
Working voltage(VDC)	450-750	450-750	450-750
Rated power(KW)	10KW, T _{in} 20℃	15KW,T _{in} 20℃	20KW,T _{in} 20℃
Current consumption (A)	≈17A	≈25A	≈33A
Controller low voltage(VDC)	9-16 or 18-32	9-16 or 18-32	9-16 or 18-32
Flow (L/h)	> 1800	> 1800	> 1800
Control signal	Rocker switch hardwire control		

HVH-Q series



- Overall dimension (L*W*H): 365*313*123mm
- Installation dimension: 275*162/275*139mm
- Joint dimension: φ25mm
- Rated power: 30KW(OEM 15KW-30KW)
- Working temperature:-40℃~85℃
- Unmarked dimensional tolerances are implemented according to GB/T18D4-V
- Use medium: cooling water and ethylene glycol ratio =50:50
- High voltage connector : GYHE-2-80Z-A
- Wire harness connector : GYHE-2-80T-A (provided by bus factory)
- Low Voltage connector : RT001 28PN03
- Wire harness connector : RT06128SNHEC03 (provided by bus factory)

Item	HVH-Q30
Rated voltage(VDC)	600
Working voltage(VDC)	450-750
Rated power(KW)	30KW, T _{in} 20℃
Controller low voltage(VDC)	9-16 or 18-32
Control signal	CAN2.0B

HVH-A series



- Overall dimension (L*W*H): 340*138*125mm
- Installation dimension: 200*118mm
- Joint dimension: φ25mm
- Rated power: 18KW(OEM 10KW-18KW)
- Working temperature:-40℃~85℃
- Product weight:< 5kg
- Use medium: cooling water and ethylene glycol ratio = 50:50
- High voltage connector: PL082X-60-6(Amphenol)
- Wire harness connector : PL182X-60-6(Amphenol)
- Low voltage connector: RT00128PN03
- Wire harness connector :RT06128SNHEC03

Item	HVH-A18
Rated voltage(VDC)	600
Working voltage(VDC)	400-900
Rated power(KW)	18KW, T _{in} 40℃
Controller low voltage(VDC)	16-32
Control signal	CAN

HVH-K series



- Overall dimension (L*W*H): 221*168*100mm
- Installation dimension: 118*66mm
- Joint dimension: $\phi 25$ mm
- Rated power: 12KW(OEM 8KW-12KW)
- Working temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- Weight: 2.5KG
- High voltage connector: PL182X-60-2.5(Amphenol)
- Wire harness connector : PL082X-60-2.5(provided by bus factory)
- Low voltage connector: AMP282108-1
- Wire harness connector :AMP282090-1

Item	HVH-K12
Rated voltage(VDC)	600
Working voltage(VDC)	400-900
Rated power(KW)	12KW, 100A
Controller low voltage(VDC)	16-36
Control signal	CAN

Electronic water pump



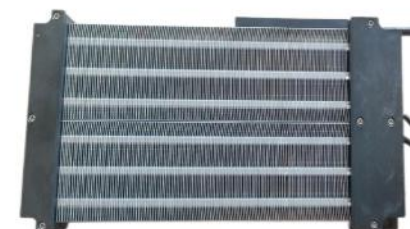
- OEM customized power: 30-2500W
- Pump head: 3-24M
- Pump capacity: 0.6-23.1(L/H)

Plate heat exchanger



- This product is designed, produced and inspected in accordance with (NB/T47045-2015) standards
- Design pressure 3.0MPa, test pressure 4.5MPa, design temperature: $-196 \sim 225^{\circ}\text{C}$
- The plate material is 316L, and the straightness of the plate package is $\leq 2\text{L}/1000$
- Monolithic heat exchange area: 0.014 square meters
- Unmarked dimensional tolerance is in accordance with GB/T 1804-M

Air PTC heating core



- Rated voltage: DC150-650V, AC220V.
- Wind speed: 5m/s, 10m/s.
- Maximum rated power: determined according to the shape structure and total length, wide type: 1kW, 1.5kW, 2kW, 2.5kW, 3kW, 4kW, 5kW, 6kW;
- Narrow: 1kW, 1.5kW, 2.5kW.
- Overall length: Wide: 192mm, 232mm, 312mm, 340mm, 350mm, 400mm; Narrow: 304.5mm, 504.5mm;
- Narrow partial fins: 220mm, 246mm, 260mm, 315mm.
- Temperature control switch: 150°C , normally closed or normally open, other specifications can be customized.
- High voltage line: temperature resistance 150°C

High voltage defroster



- Suitable for defrosting and defogging the windshield of electric passenger cars
- Using PTC heating components, high safety
- With temperature protection and overheating alarm function, control the temperature in a safe range.
- Heating body power range: 1.5KW-----6KW;
- heating body voltage: 300V---700V