

**EWWP-KBW1N**  
**EWLP-KBW1N**

Y3R*	Reverse valve of water circuit	R3T	Condensor inlet water temperature sensor	F3U	Fuse controller PCB
Y1S, Y2S	Liquid solenoid valve circuit 1, circuit 2	Q1D, Q2D	Discharge thermal protector circuit 1, circuit 2	F1U	Fuse I/O PCB
X1-82(A/B/M)	Connectors	PE	Main earth terminal	F6 #	Fuse for pumpcontactor
TR2	transfo 230V -> 24V for supply of I/O PCB	M1C, M2C	Compressor motor circuit 1, circuit 2	F5 ##	Surge proof fuse
TR1	transfo 230V -> 24V for supply of controller PCB	K1P*	Pump contractor	F4	Fuse I/O PCB
S12M	Main isolator switch	K1F, K2F #	Fan contactor	F1, F2, F3 #	Main fuses for the unit
S10L	Flowswitch	K6S*	Overspeed relay pump	E1H, E2H	Crankcase heater circuit 1, circuit 2
S9S*	Switch for remote start/stop or dual setpoint	K4S, K5S	Overspeed relay circuit 1, circuit 2	A72P**	PCB: power supply card
S7S*	Switch for remote cooling/heating selection or dual setpoint	K1M, K2M	Compressor contactor circuit 1, circuit 2	A71P**	PCB: remote user interface
S4LP, S5LP	Low pressure switch circuit 1, circuit 2	H6P*	Indication lamp general operation	A3P**	PCB: address card
S1HP, S2HP	High pressure switch circuit 1, circuit 2	H5P*	Indication lamp operation compressor 2	A2P	PCB: I/O PCB
R5T	Condenser inlet water temperature sensor	H4P*	Indication lamp operation compressor 1	A1P	PCB: controller PCB
R4T	Evaporator outlet water temperature sensor	H3P*	Indication lamp alarm		

A2P	A1P
DIGITAL INPUTS DI1 Reverse phase detection (L1-N) DI2 Reverse phase detection (N-L3) DI3 M1C ON detection DI4 M2C ON detection DI5 Safety device detection DI6 Pump ON detection DI7 -- DI8 -- DI9 -- DI10 Reverse valve request	DIGITAL INPUTS X1 (ID1-GND) : Flow switch X1 (ID2-GND) : Remote C/H selection X1 (ID3-GND) : High pressure switch + discharge protector + overspeed X1 (ID4-GND) : Low pressure switch X1 (ID5-GND) : remote On/Off
DIGITAL OUTPUTS (RELAYS) RY1 Reversed phase protector RY3 Pump/general operation RY9 M1C off (during defrost) RY10 M2C off (during defrost) RY27 Reversing valve of water circuit	DIGITAL OUTPUTS (RELAYS) X2 (C12-N01): Compressor M1C on X2 (C12-N02): Compressor M2C on X2 (C34-N03): voltage free contact for pump X2 (C34-N04): Reversing valve X2 (C5-N05): alarm voltage free contact
OTHERS HAP light emitting diode (service monitor green) H1P, H2P light emitting diode (service monitor red)  S1A dipswitch (unit setting) S2A dipswitch (defr. & fan setting)	ANALOG INPUTS X1 (B1-GND): evap inlet water t° X1 (B2-GND): evap outlet water t° X1 (B3-GND): cond inlet water t°
	ANALOG OUTPUTS X1 (Y-GND):

All models (400V)						
Fuses + overcurrent	WC014 RC012	WC 022 RC020	WC028 RC026	WC035 RC030	WC045 RC040	WC055 RC055
F1, F2, F3 (+ gL/gG)	3x16A	3x20A	3x25A	3x32A	3x40A	3x50A
F4	8A	8A	8A	8A	8A	8A
F5	250mAT	250mAT	250mAT	250mAT	250mAT	250mAT
F1U	5A	5A	5A	5A	5A	5A
F3U	315mAT	315mAT	315mAT	315mAT	315mAT	315mAT
K4S	9A	14.5A	18.5A	22A	14A	18A
K5S	--	--	--	--	14A	18A
					20A	

	Not standard included	
	Not possible as option	Poss. as option
Obligatory	#	##
Not obligatory	*	**

1TW60146-1A

**NOTES**

1. • : Terminal 1, —— : Wire 2; ----- : Field wiring to be in accordance with the local electrical regulations, —— : Earth wiring

: Option, : PCB : Outside switchbox

2. If compressor rotates reversely, it may be damaged

3. WC: Watercooled chiller

RC: Unit with remote condenser

4. Optional:

- EKAC10C = address card kit for Modbus or remote user interface connection
- EKSS = softstart
- EKRUMCA = remote user interface

5. Terminals for fieldwiring:

X1M: H3-6P, Y3R, K1-2F: Output terminal for fieldwiring (voltage free contact max 2A/Output)

X3M: Input terminal for fieldwiring (don't connect voltage) (switch load 6mA/30VDC)

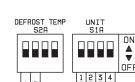
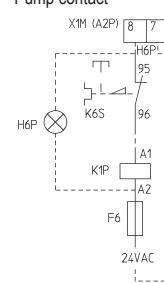
6. Y3R is activated in cooling mode

S7S open = heating

S7S closed = cooling

7. Dipswitch setting

 S2A dipswitch: defrost & fan setting  
no meaning for WC CO & WC CL CO

**8. Pump contact**


S1A dipswitch: Unit setting

- 1>off = 1 circuit
- on = 2 circuit
- 234 > Off Off Off = WC CO & WC CL CO
- Off On Off = AC CO
- On Off Off = AC HP (without compr stop for defrost cycle)
- On Off On = AC HP (with compr stop for defrost cycle)