



**better solution
higer efficiency**

SUZHOU CORESTAR TECHNOLOGY CO.,LTD

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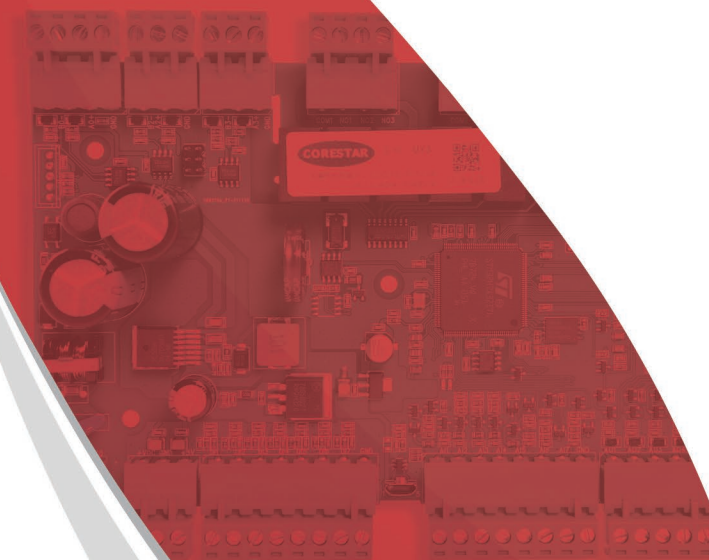
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CORESTAR

Control / Sensing / IoT

SUZHOU CORESTAR TECHNOLOGY CO.,LTD



Profile

About us

Suzhou Corestar Technology Co.,Ltd is located in Suzhou, China. We are the manufacturer specializing in control solutions for air conditioning, refrigeration and heating. Our product design aims to achieve energy conservation and reduce environmental impact. This is enabled by the combination of advanced technology and customized services, with the goal of optimizing the performance of equipment and systems. Our solutions are used in commercial, industrial and residential applications.

Main Business

Control

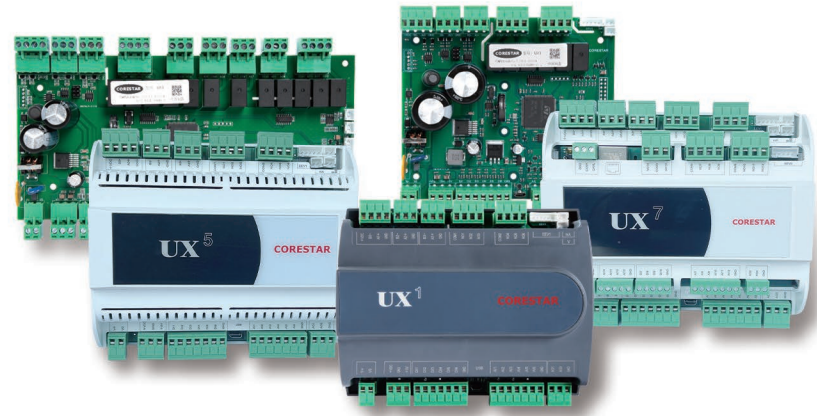
Sensing

IoT

CORESTAR

www.corestartech.com

Programmable Controller (PLC)



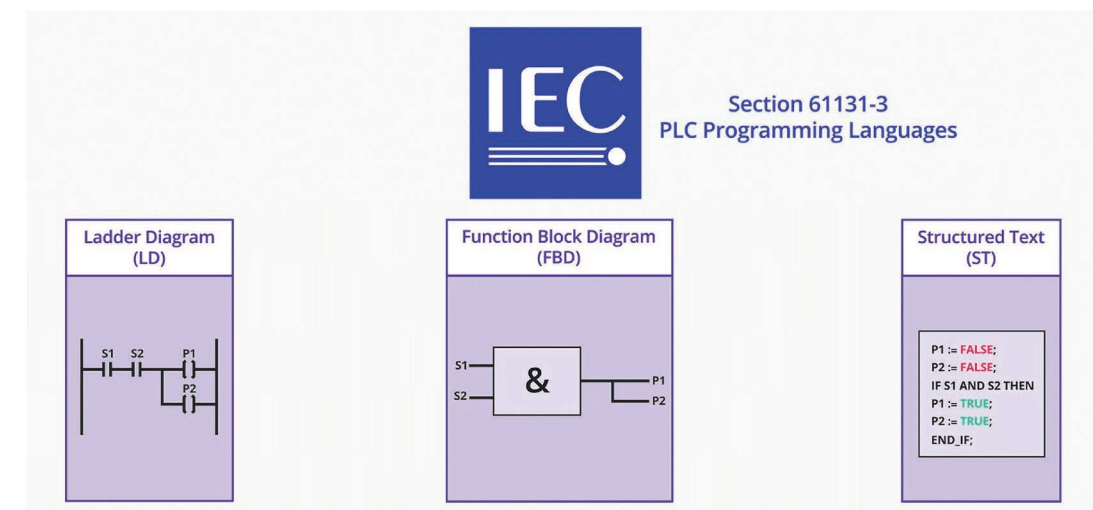
P/N	UX1	UX2	UX3	UX5	UX7	UX7S
Power Supply	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC
Plastic Cover	Optional	No	No	Optional	No	Yes
Dimensions (L*W) mm	138.8*120.1 (PCB)	180*107	220*107	138.8*120.1 (PCB)	138.8*120.1	165*125
Connectors	removable	FAST-ON	removable	removable	removable	removable
Analogue Inputs	NTC	6	9	12	6	16
	0-5V	1	7	5	4	8
	0-10V	1	1	2	1	2
	4-20mA	1	1	2	1	6
	PT1000	6	9	12	6	16
Digital Inputs	Voltage Free	6+4 (AI)	7+4 (AI)	10+4 (AI)	6+4 (AI)	14+4 (AI)
	Pulse	2	2	2	2	2
	Active	0	0	0	0	6
Digital Outputs	Power Relay	6	9	12	5	12
	Solid State Relay (SSR)	0	0	0	1AC load only	2AC load only
Analogue Outputs	0-10V	2	4	4	2	4
	PWM	1	2	2	1	8
Connectivity	EEV Driver (uni-polar)	1	2	2	1	2
	Current Sensing	1	0	1	3	3
	Voltage Sensing	1	0	1	0	0
	RS485	3	3	3	3	3
	Expansion Interface	0	0	0	1	0
	Ethernet	0	0	0	Expansion Card	1
	CAN2.0	0	0	0	Expansion Card	1
APP Upgrade	USB or OTA	USB or OTA	USB or OTA	USB or OTA	USB or OTA	USB or OTA
Programming	GrafEditor	GrafEditor	GrafEditor	GrafEditor	GrafEditor	GrafEditor

IDE for Programmable Controllers



- Fully compatible with IEC61131-3
- Provide HVAC/R related mature algorithm library
- Debug on target

Graphical Programming Supports Secondary Development



Universal I/O Expansion Module



► Relays: 5*SPST + 1*SPDT + 2*SSR

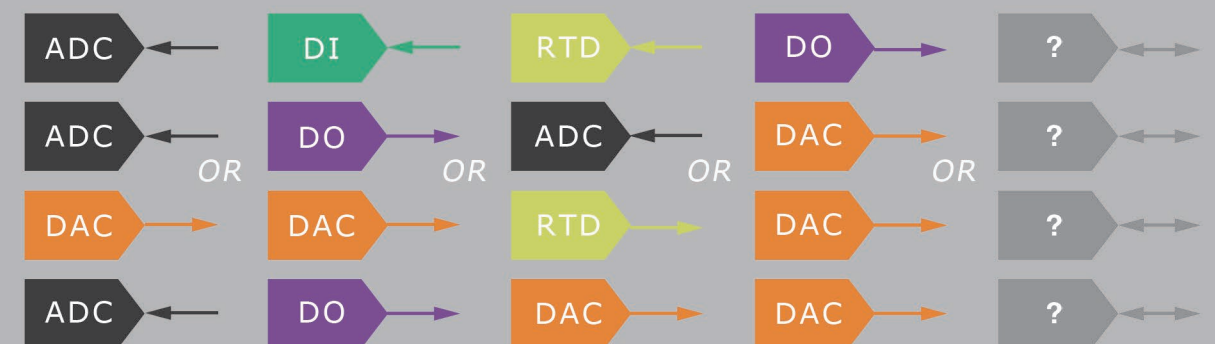
► 8 universal configurable I/O, can be used as:

- NTC
- PT100
- PT1000
- 0-5V
- 0.5~4.5V
- 0-10V
- 2-10V
- 0-20mA
- 4-20mA
- J type thermocouple
- K type thermocouple
- digital input
- Fast digital pulse detection

► Communication:

- Standard Modbus RTU
- IO-LINK, directly connected to PLCs such as Siemens, no need additional communication modules

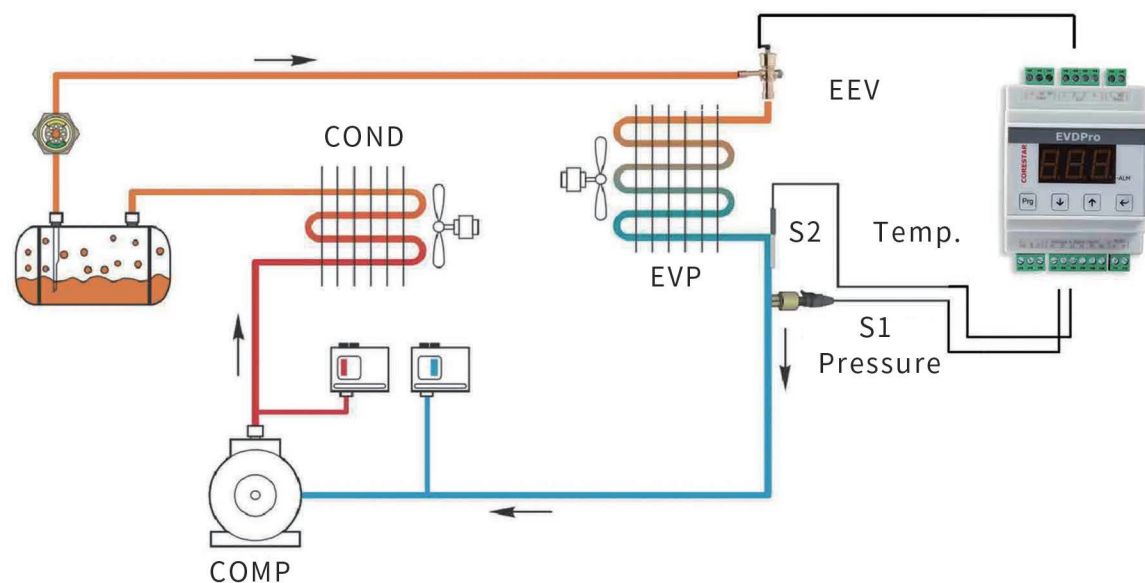
Any Function, Any Pin



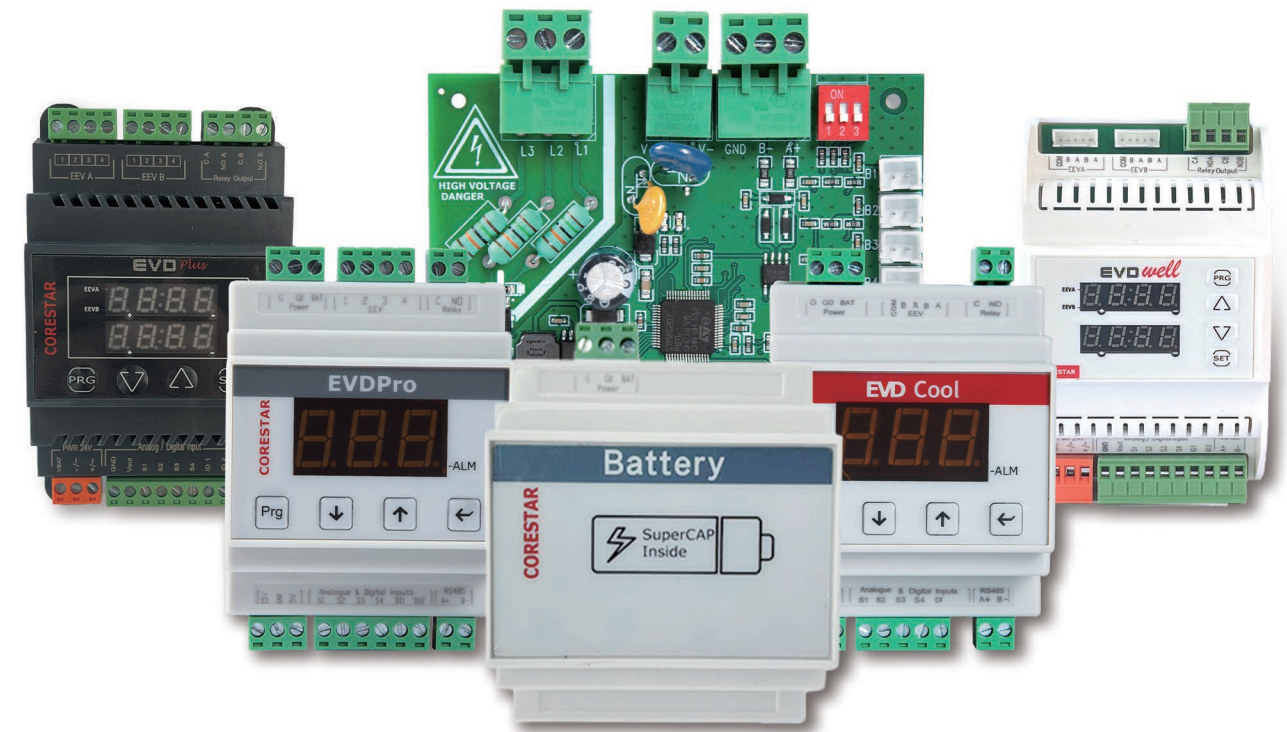
Superheat Control Solution



Typical Application Diagram

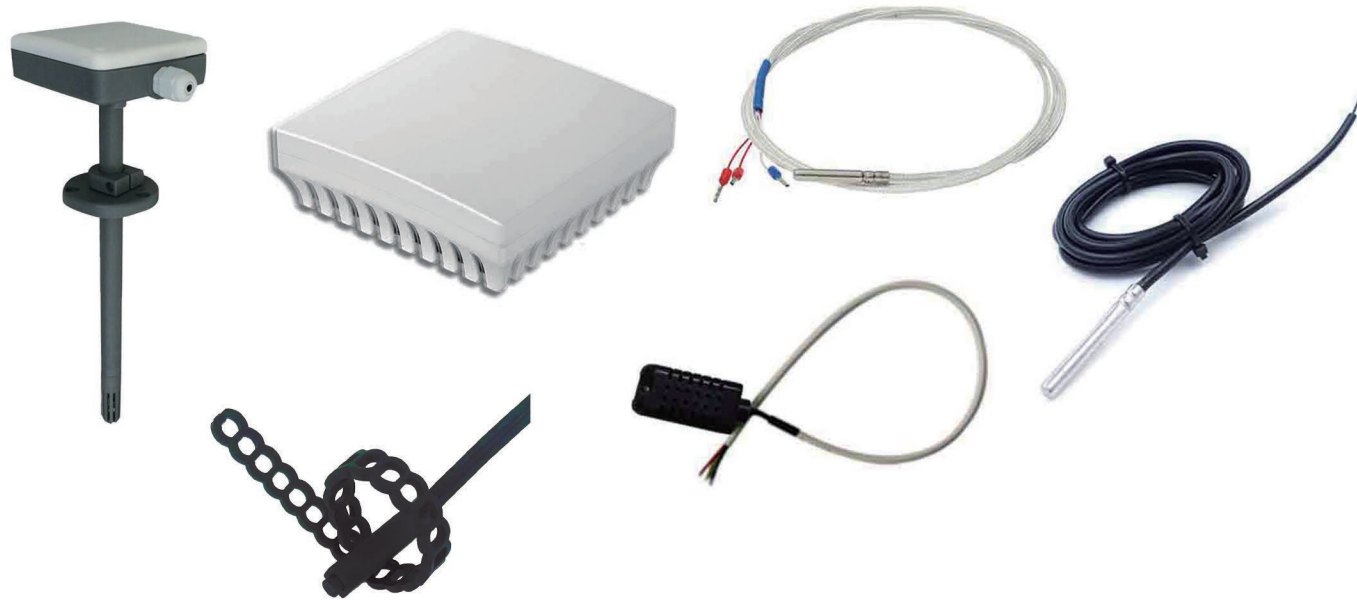


Electronic Expansion Valve Controller (EEV Controller)



P/N	EVDCool	EVDWell	EVD4	EVDPro	EVDPlus
EEV Type	uni-polar			bi-polar	
Quantity of Valves	1	2	4	1	2
Independent Control	Yes	Yes	No	Yes	Yes
Superheat Control	√	√	√	√	√
Liquid Level Control	√	√		√	√
4-20mA Control	√	√	√	√	√
0-10V Control	√	√	√	√	√
Hot Gas by Pass	√	√	√	√	√
Power Supply	24VAC/DC	24VAC/DC	24VAC/DC	24VAC/DC	24VAC/DC
Connectivity	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU

Temperature and Humidity Sensor



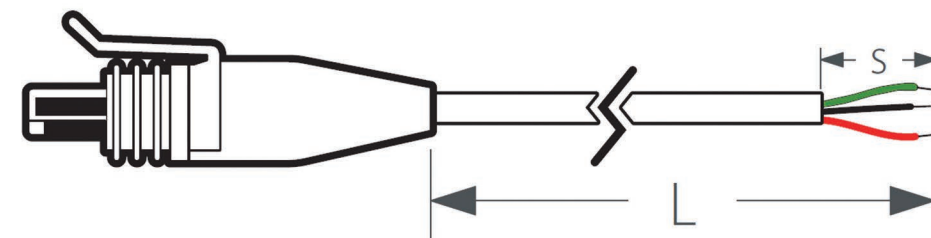
P/N	Temp. Range	Hum. Range	Material	Resistance@25°C	Length	IP level	Install	Comments
ESR10-N-**M	-40T105	-	Metal	10 kΩ ±1%	3M, 8M	IP67	Bundle	
ESR10-P-**M	-40T105	-	Plastic	10 kΩ ±1%	3M, 8M	IP67	Bundle	
ESR10-F-**M	-40T105	-	Metal	10 kΩ ±1%	3M, 8M	IP67	Bundle	with fasten clip
ESR10-T-**M	-40T105	-	Metal	10 kΩ ±1%	3M	IP67	Thread	water temperature
ESR11-H-**M	0T150	-	Metal	50 kΩ ±1%	3M, 8M	IP55	Bundle	
ESR11-F-**M	0T150	-	Plastic	50 kΩ ±1%	2M	IP67	Bundle	with fasten clip
ESRPT-1K-**M	-100T150	-	Metal	-	3M	IP67	Bundle	
ESR-TH-485A	-30T80	0-100%RH	Plastic	-	-	IP67	Screw	Modbus
ESR-TH-485B	-30T80	0-100%RH	Plastic	-	-	IP67	Duct Type	Modbus
ESR-TH-ANA	-40T80	0-100%RH	Plastic	-	-	IP67	Wall-Mounted	4-20mA and resistance

PKS series Pressure Transmitter



P/N	Pressure(bar)		Over Pressure	Burst Pressure
	0.5V	4.5V	bar	bar
PKSV-1093	-1	9.3	18.6	27.9
PKSV-1128	-1	12.8	25.6	38.4
PKSV00200	0	20	40	60
PKSV00345	0	34.5	69	103.5
PKSV00500	0	50	100	150

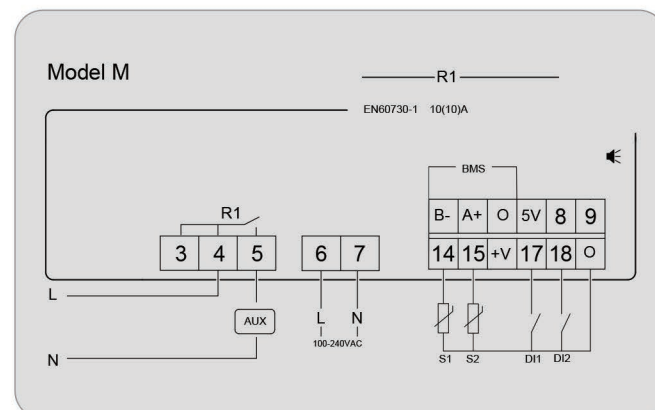
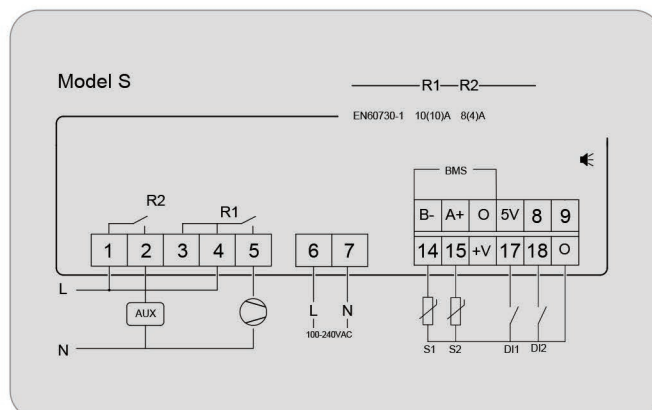
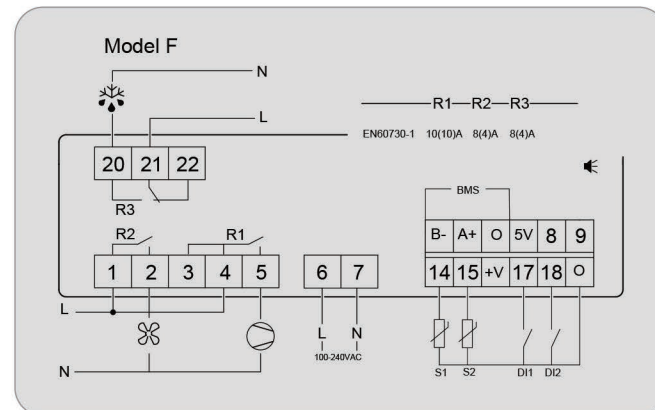
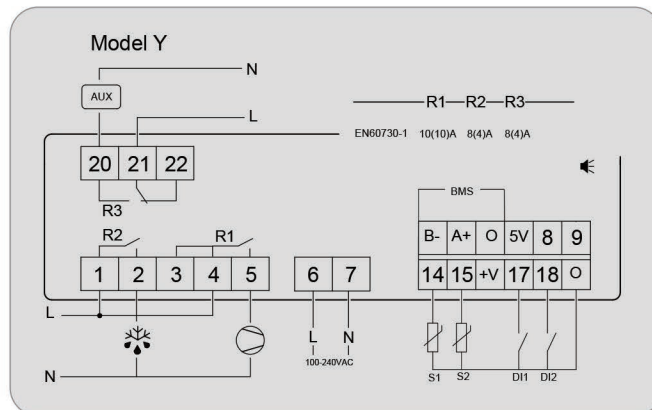
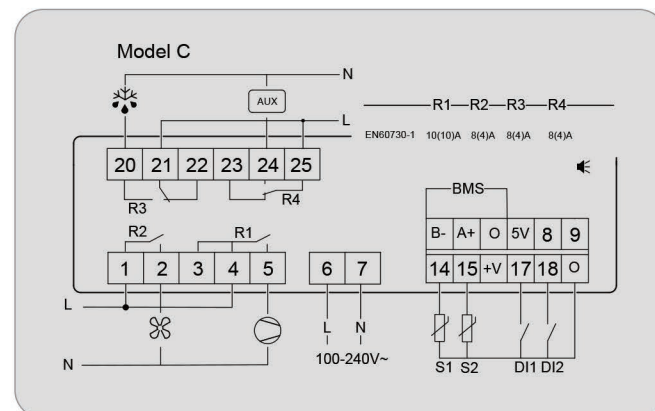
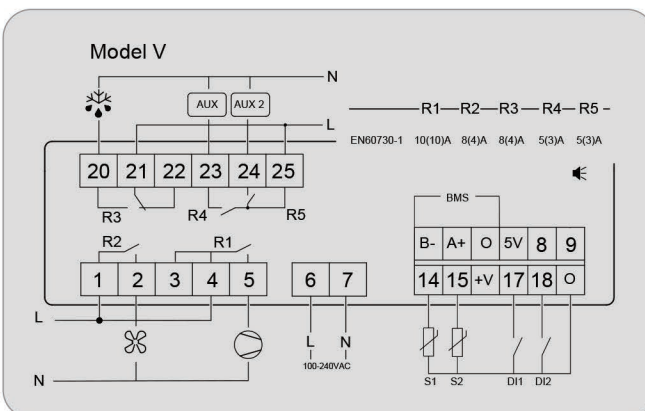
PKS series Cables



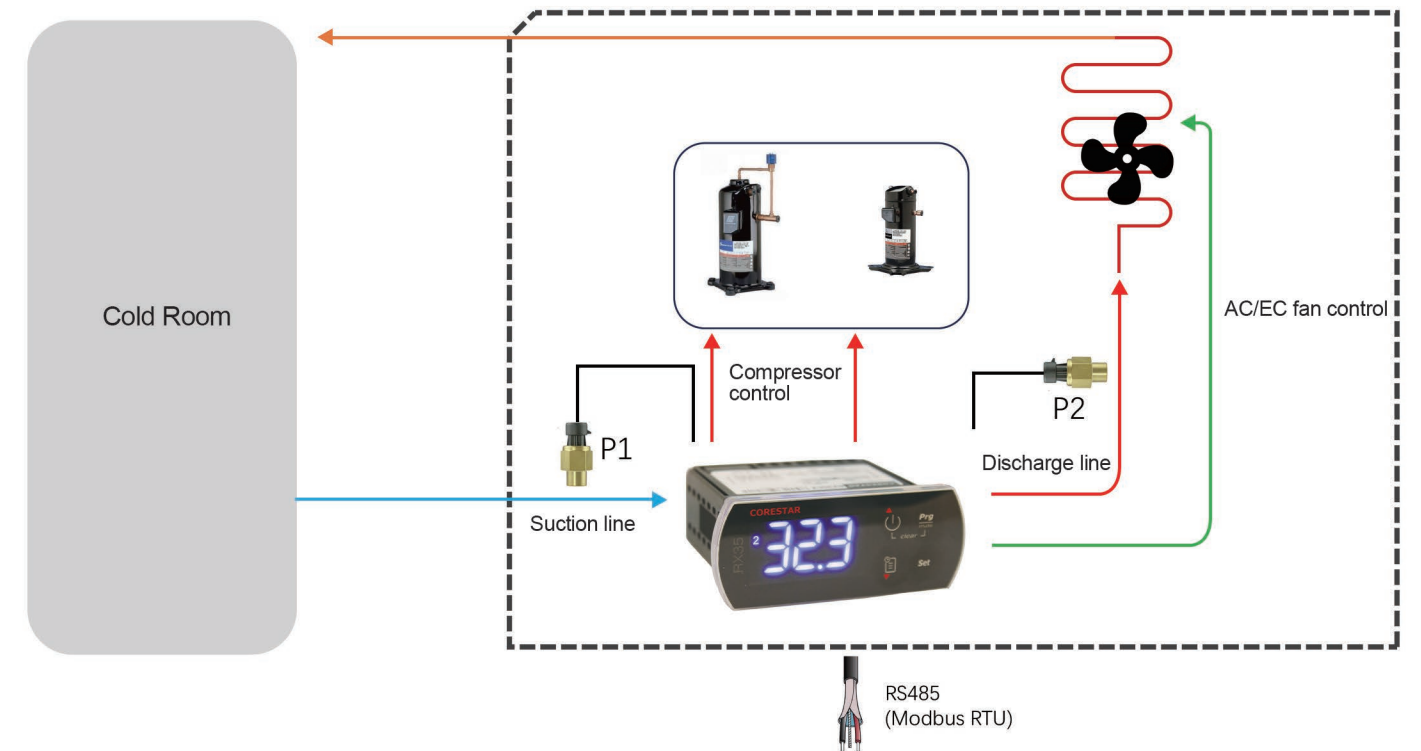
P/N	Length(L)	Packard IP Protection	VDD Color	Vout Color	GND Color
PKSC00200	2.0M	IP65	Red	Green	Black
PKSC00500	5.0M	IP65	Red	Green	Black
PKSD00800	8.0M	IP65	Red	Green	--
PKSD01500	15.0M	IP65	Red	Green	--

NOTE: Three-core cables are for 0.5V~4.5V output type only. Two-core cables are for 4-20mA output type only.

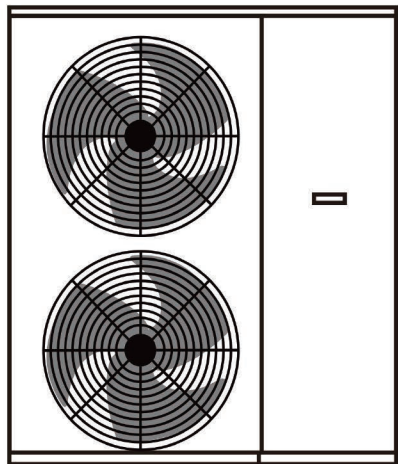
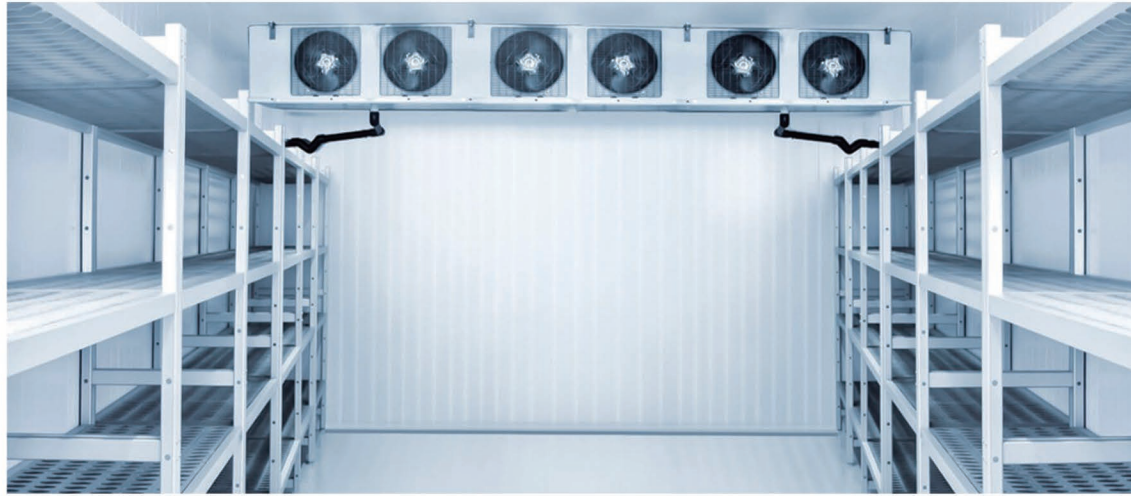
Commercial Refrigeration Controller RX33



Digital Scroll Condensing Unit Controller RX35CX



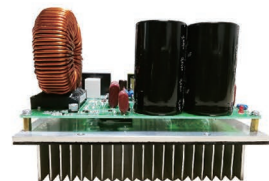
High Efficiency Condensing Unit Control Solution



Advanced algorithms (oil recovery, oil injection, liquid injection, vapor injection)



4.3inch touch display, easier to understand the unit



DC inverter with max two DC interfaces

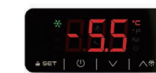


Build-in EEV driver supports multiple brands of EEV

High Efficiency Plug-in Units Control Solution



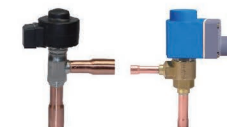
Three build-in RS485 interfaces, easy connected.



Touch and LED displays are selectable



DC inverter with tested BLDC compressors, up to 6.5Kw



Integrated drivers for EEV stepper or PWM valve

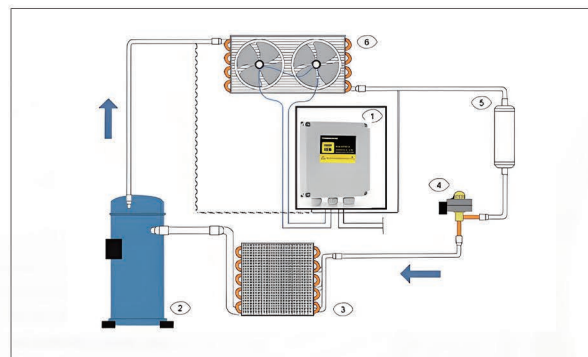
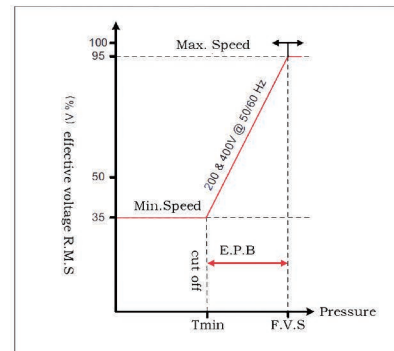


Integrated drivers for EC and DC fan speed regulation

Condenser Fan Speed Controller



Single Phase



Three Phase

- Max output power of Single Phase: 2.0KW
Max output power of Three Phase: 5.0KW
- Can work alone with pressure (ratiometric or electronic) or temperature sensor
- Support Modbus RTU

Air Quality Module



Select only what you need

- ✓ CO₂
- ✓ PM1.0
- ✓ PM2.5
- ✓ PM10
- ✓ Temperature
- ✓ Humidity
- ✓ VOC
- ✓ Air Pressure
- ✓ Dew Point
- ✓ Modbus RTU

Power Supply: 10-40VDC

Build-in Serial Port (Modbus RTU)

All parameters are selectable

Supports serial connection

Use top brand sensors

Supports wall mounting

Temp. Precision: $\pm 1^{\circ}\text{C}$

PM2.5 Precision:
<100ug/m³ : $\pm 15\text{ug/m}^3$,
>100ug/m³: $\pm 15\%$ reading

Humidity Precision: $\pm 5\%$

CO₂ Precision: $\pm 40\text{PPM} \pm 3\%$ reading

VOC Precision: $\pm 20\%$

Module Dimension: 80mm (L) X 80mm (W) X 27mm (H)