

Enviro-Source™ Emergency Switchover Module

Parts Manual



Table of Contents

<i>Product Description</i>	1
<i>1.0 Electrical Section</i>	2
1.1 Toggle Switch	2
1.2 Push Button Switch.....	3
1.3 Power Block	3
1.4 Term Lug.....	3
1.5 Contactor	4
1.6 Relay.....	4
1.7 Overload Relay.....	5
1.8 Bracket	5
1.9 Relay.....	5
1.10 Transformer	6
1.11 TermStrip Section 1	6
1.12 TermStrip End Barrier	6
<i>2.0 Exterior Section</i>	7
2.1 Side Left.....	7
2.2 Side Right	8
2.3 Front/Top	8
2.4 Bezel.....	9
2.5 Pump	9
<i>3.0 Piping Section</i>	10
3.1 Piping Supply	11
3.2 Heat Exchanger.....	11
3.3 Valve Access Body	11
3.4 Valve Core Refrigerant.....	11
3.5 Switch Flow	12
3.6 Preventer	12
3.7 Valve Solenoid	12
3.8 Valve Ball Bronze	13
3.9 Valve Check	13

Product Description

The Enviro-Source™ Module is an accessory to the Process Chiller, for use on systems that circulate water and/or glycol solutions that require an isolated loop from the emergency water source. With the heat exchanger providing fluid separation, the Enviro-Source™ automatically switches to the emergency water source on a high fluid temperature alarm. Additionally, the module automatically switches to standby pump operation (with interlock to shut down the Process Chiller pump) on a loss of flow alarm.

The Enviro-Source™ Module is available in 208/230/460V, single-phase and three-phase, 60 Hz configurations.

This module is a pre-piped and wired assembly that is encased in an almond colored, powder coated and baked cabinet. It consists of a copper brazed stainless steel heat exchanger, stainless steel pump, copper piping, RCM4 alarm monitor, adjustable time delay relays, high temperature thermostat, cooling solenoid valve, check valve and flow switch. It also includes a manual ball valve and double-check back-flow preventer on the city water line.

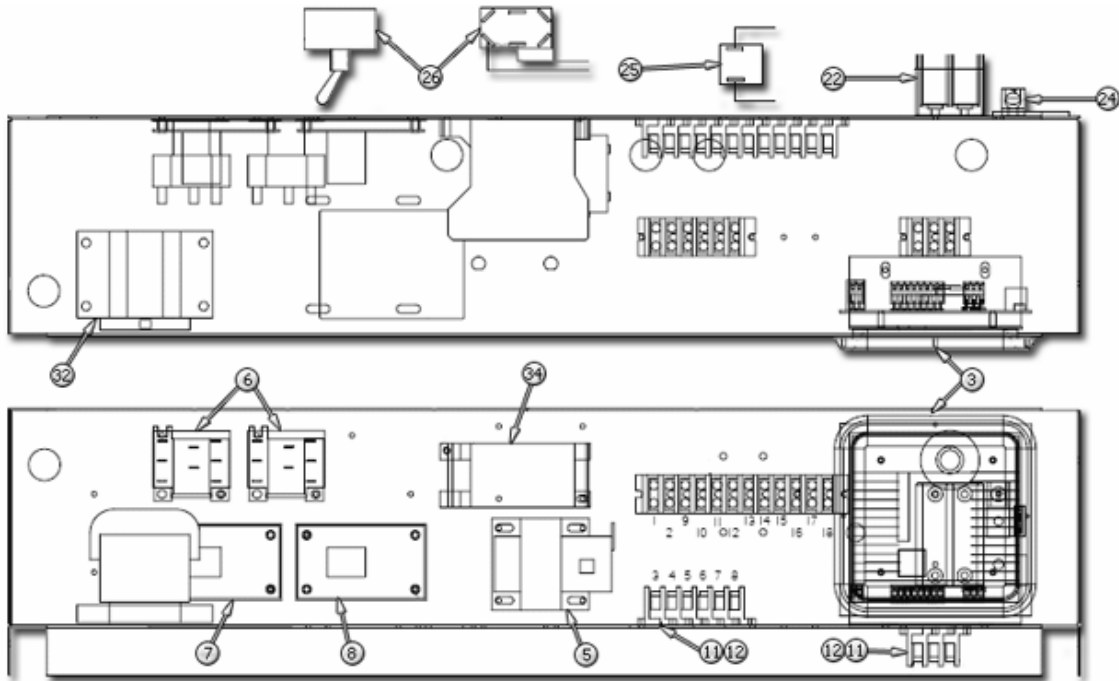
The integral RCM4 alarm monitor has a local display of normal operation, standby pump and standby cooling, "on" LED. Terminal strips are included for two optional alarms (customer supplied dry contacts) and for common alarm output (dry contacts, NC/NO/COM).

Table 1 Model numbers for minimum application flow

Model #	Range (gpm)
ENV05G_00	0.3 - 1.1
ENV10G_00	3.7 - 13.3
ENV20G_00	3.7 - 13.3

The Process Chiller is modified with a bypass line to permit water to flow around the chiller's pump when the standby pump in the Enviro-Source™ Module is operating. This bypass line runs from the pump suction line to the pump discharge line and includes a ball valve and check valve.

1.0 Electrical Section



- | | | | |
|----|--------------------|----|-----------------------|
| 26 | Toggle Switch | 34 | Overload Relay |
| 25 | Push Button Switch | 7 | Bracket |
| 22 | Power Block | 6 | Relay |
| 24 | Term Lug | 5 | Transformer |
| 32 | Contactor | 11 | TermStrip Section 1 |
| 6 | Relay | 12 | TermStrip End Barrier |

1.1 Toggle Switch



Part Number	Description	QTY
E-3490	SW 2P2T TOGGLE	3

1.2 Push Button Switch



Part Number	Description	QTY
E-3780	SW PSHBTN MOM SPST NC	1

1.3 Power Block



Part Number	Description	PS018	PS024	PS048
E15-0010	PWRBLK 2PL 1)2/0:12 X 4)4:14	1	1	1

1.4 Term Lug



Part Number	Description	QTY
E-362B	TERM LUG MECH #14-2/0 1/4"	1

1.5 Contactor



Part Number	Description	PS096	PS102
124503P1	CONTACTOR 3PL 24V 15/20 1NO1NC	1	1

1.6 Relay



Part Number	Description	QTY
E-0130	RELAY 2P2T 24VAC COIL	2

1.7 Overload Relay

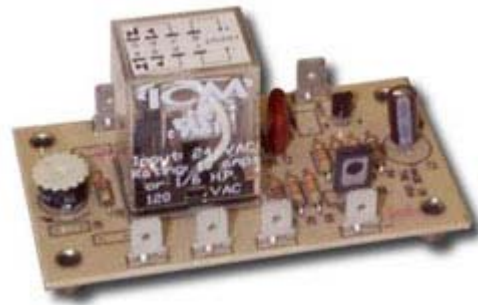


Part Number	Description	PS018	PS024	PS048
124547P1	OVERLOAD RELAY W/B MNT 32A C-H	1	1	1

1.8 Bracket

Part Number	Description	QTY
140072G3	RCM4 W/BRACKET ENV	1

1.9 Relay



Part Number	Description	QTY
E-3530	RELAY T/D 24V 2P2T ADJ 90SEC	1

1.10 Transformer



Part Number	Description	QTY
127184P1	XFMR 75VA 208/230-24 50/60HZ	1
127184P2	XFMR 75VA 460-24 50/60HZ	1
E-007A	XFMR 075VA 60 230-24	1
E-007B	XFMR 075VA 60 460-24	1

1.11 TermStrip Section 1



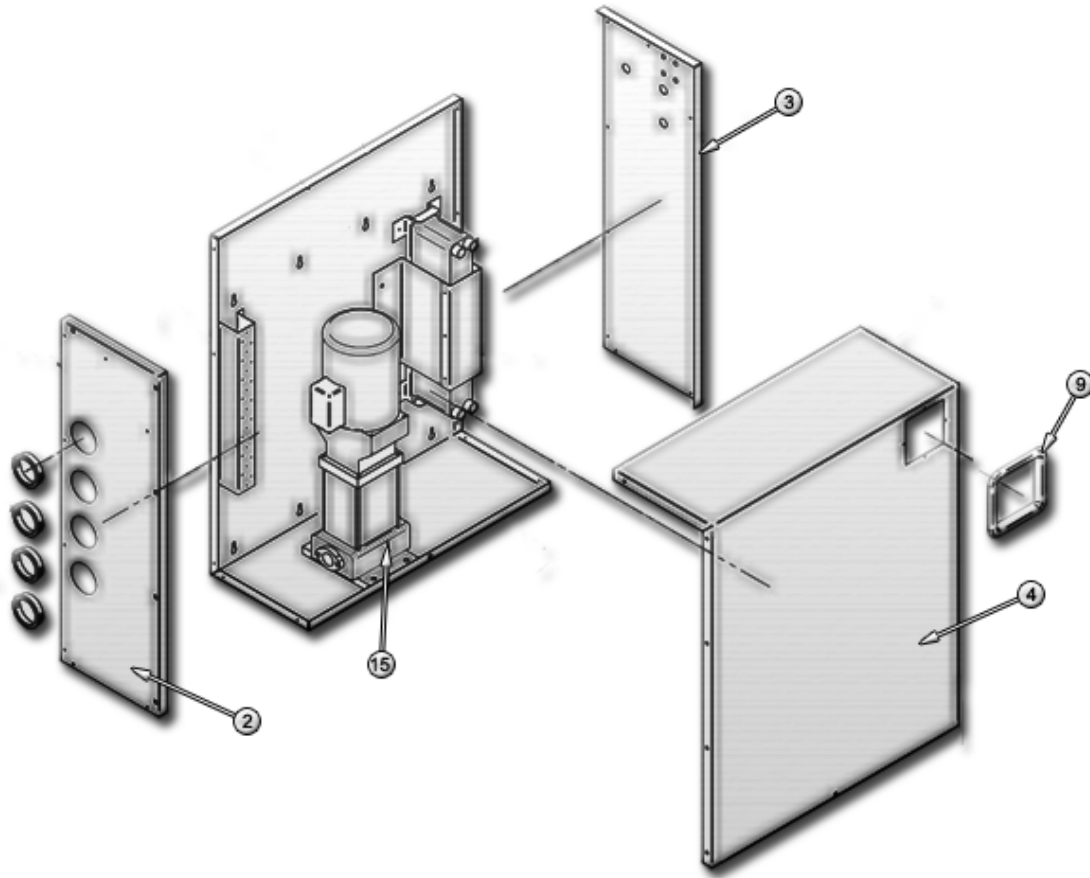
Part Number	Description	QTY
132487P1	TERMLSTRIP SECTION 1 POS	21

1.12 TermStrip End Barrier



Part Number	Description	QTY
132487P2	TERMLSTRIP SECTION END BARRIER	3

2.0 Exterior Section



2	Side Left	9	Bezel
3	Side Right	15	Pump
4	Front/Top		

2.1 Side Left



Part Number	Description	QTY
140165P1	SIDE LEFT ENVIRO	1

2.2 Side Right



Part Number	Description	QTY
140166P1	SIDE RIGHT ENVIRO	1
154674P2	SIDE RIGHT ENVIRO 20 E6562-4	1

2.3 Front/Top



Part Number	Description	QTY
140154P1	FRONT/TOP EWS	1

2.4 Bezel



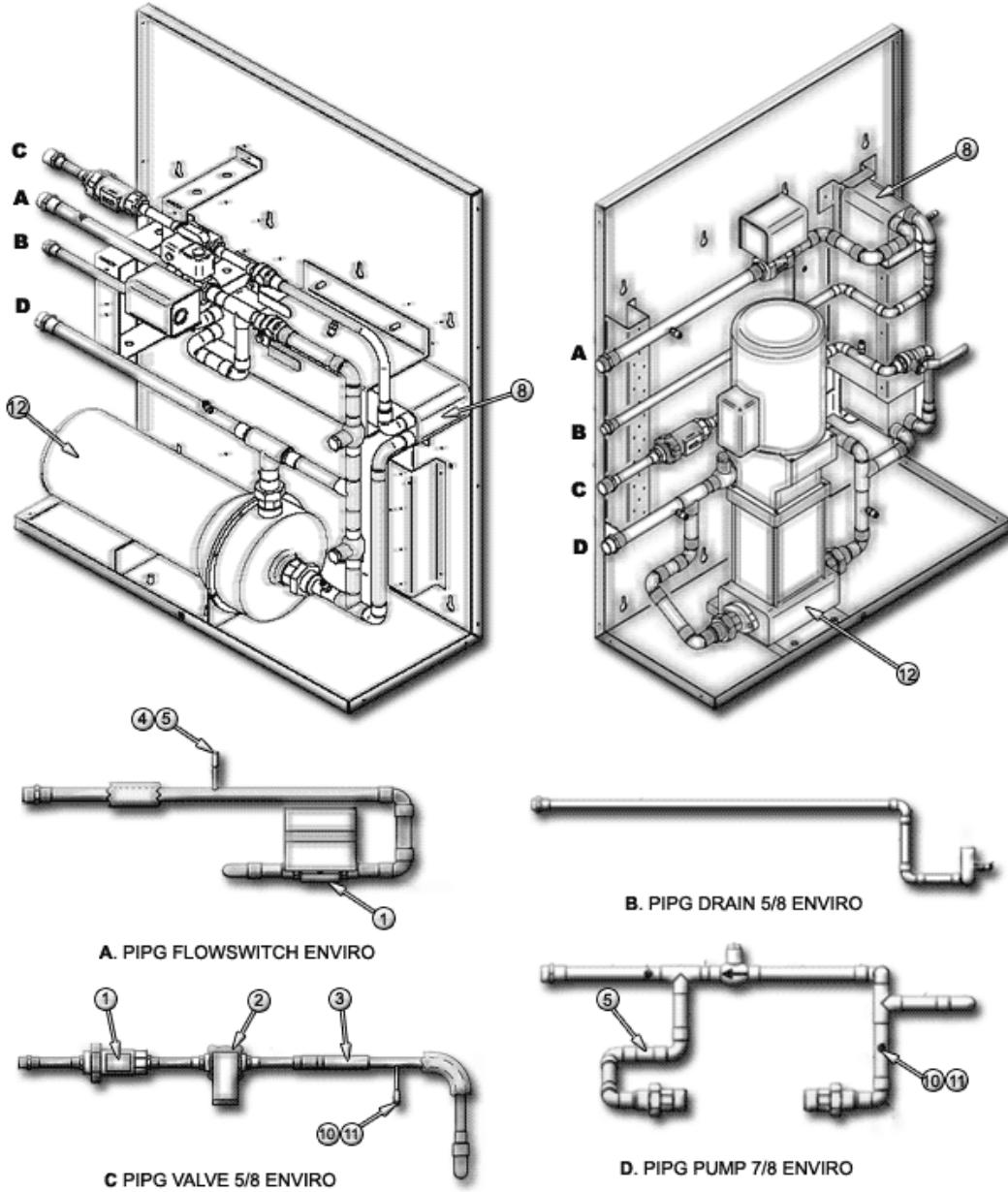
Part Number	Description	QTY
S-6210	BEZEL S3 ON/OFF/DISC	1

2.5 Pump



Part Number	Description	QTY
140204P1	PUMP .75HP 208/230-1-50/60 SS	1
140204P2	PUMP 1.0HP 208//460-3-50/60 SS	1
140204P3	PUMP .75HP 208//460-3-50/60 SS	1

3.0 Piping Section



- | | | | |
|----|------------------------|----|------------------------|
| 8 | Piping Supply | 12 | Heat Exchanger |
| 4 | Valve Access Body | 1 | Switch Flow |
| 5 | Valve Core Refrigerant | | |
| 1 | Preventer | 10 | Valve Access Body |
| 2 | Valve Solenoid | 11 | Valve Core Refrigerant |
| 3 | Valve Ball Bronze | | |
| 5 | Valve Check | 11 | Valve Core Refrigerant |
| 10 | Valve Access Body | | |

3.1 Piping Supply

Part Number	Description	QTY
169592G1	PIPG SUP TO HTEXCHGR ENV20GPM	1

3.2 Heat Exchanger

Part Number	Description	QTY
169595G1	PIPG HTEXCHRG/PMP ENV20GPM	1

3.3 Valve Access Body



Part Number	Description	QTY
P02-0270	VALVE ACCESS BODY 1/4X SWT	1

3.4 Valve Core Refrigerant



Part Number	Description	QTY
P02-0290	VALVE CORE REFRIGERANT	1

3.5 Switch Flow



Part Number	Description	QTY
P-4940	SW FLOW 3/4FPT 1P2T	1
127998P1	SW FLOW ASSY 1-3/8"	1

3.6 Preventer



Part Number	Description	QTY
140817P1	PREVENTER BACKFLO 3/4" 2X CHEK	1

3.7 Valve Solenoid



Part Number	Description	QTY
1A23985P1	VALVE SOLND 1/2" NC 24V 50/60	1
1C19539P1	VALVE SOLND 3/4MXF 24V 50/60	1

3.8 Valve Ball Bronze



Part Number	Description	QTY
1C14431P1	VALVE BALL BRONZE 1/2SWT F/P	1
1C14431P4	VALVE SOLND 3/4MXF 24V 50/60	1

3.9 Valve Check



Part Number	Description	QTY
P-411D	VALVE CHECK 7/8"ODBRONZE SWT	1
P-4110	VALVE CHECK 1-1/4"ODBRONZE SWT	1