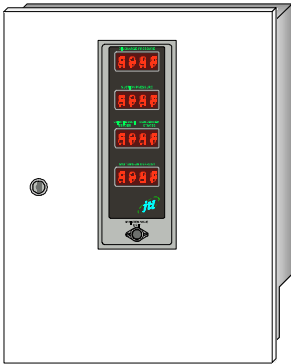


COMPRESSOR CONTROLLER for variable capacity compressors

CPST



Type CPST is a unit suitable for the control of groups of variable capacity compressors and associated condenser and the scheduling of defrosts. The unit measures up to **3 suction pressures** and maintains each pressure within adjustable limits by varying the capacity of the compressors as appropriate. **Discharge pressure** is also monitored and is maintained within adjustable limits by increasing or decreasing steps of condensing as appropriate.

Type CPST guards against compressor short-cycling, aims to maintain total running hours for the compressors equal throughout the lifetime of the equipment and **monitors fault conditions** on each compressor.

Type CPST may be used for single or dual temperature compressor groups, with or without controlled satellites. Up to 6 defrosts per day can be scheduled on each of the associated evaporators by setting a schedule of defrost start times, defrost durations and defrost patterns. The commands are routed via the JTL network.

Compressors and **condensers** are controlled and monitored by connecting JTL analogue compressor interface units to CPST (see separate sheet IFx-x for details).

Suction and discharge pressures together with simple alarm messages are indicated locally on the display. Type CPST provides comprehensive **alarm reporting, data-logging**, remote data access and remote control of defrosts at JTL refrigeration controllers when connected to a JTL Network controller.

CPST can be used with off cycle, electric 3 pipe or ring main gas defrost systems.

FEATURES

- ◆ Controls up to 10 variable capacity compressors
- ◆ Unequal capacity compressor control
- ◆ Short cycle prevention
- ◆ Balanced running hours
- ◆ Controlled start up
- ◆ Satellite control
- ◆ Multiple suction control
- ◆ Controls up to 7 steps of condensing (12 with bank switching)
- ◆ Variable fan speed control
- ◆ Schedules up to 28 defrost systems (via JTL network)
- ◆ 6 defrosts a day/system
- ◆ JTL plant interface communication system
- ◆ Pressure and temperature measurement inputs
- ◆ JTL Network communications
- ◆ Watchdog to ensure reliable operation
- ◆ Non-volatile set-up memory
- ◆ 4 four digit LED displays
- ◆ Battery supported datalogging
- ◆ Battery supported real time clock
- ◆ Maintenance Unit socket



HARDWARE

◆ Pressure transducer inputs	4
◆ Temperature sensor inputs	7
◆ Temperature sensor types supported	JTL
◆ Pressure display drives	4
◆ Voltage-free contact outputs	2
◆ Optically isolated high voltage inputs	2 (240V max)
◆ Data-logging memory capacity	900 points on 4 channels

TECHNICAL SPECIFICATION

Pressure input 1	Satellite suction pressure
Pressure input 2	Discharge pressure
Pressure input 3	HT suction pressure
Pressure input 4	LT suction pressure
Temperature input 1	LT suction gas temperature
Temperature input 2	HT suction gas temperature
Temperature input 3	Discharge gas temperature
Temperature input 4	Satellite suction gas temp.
Temperature input 5	Sub-cooled liquid temperature
Temperature input 6	Saturated gas temperature
Temperature input 7	Plant room temperature
Output 1	Not used
Output 2	Watchdog
Relay output rating	2A resistive (240 V max.)
Communications port	RS485 2 wire
Communications data rate	4800/38400 baud (auto selected)
Communications protocol	JTL zone protocol
Input 1	Auto/manual control switch
Input 2	Low liquid level
Dimensions	347 x 456 x 86 mm
Weight	6 kg
Power supply (standard)	230 V 48-62 Hz
(optional)	110 V

ORDERING INFORMATION

CPST-BD Complete unit in enclosure with display

Power Supply Options:

For 110 V append - 110 to order code



This unit conforms with the relevant EU standards when fitted in accordance with its installation instructions.

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