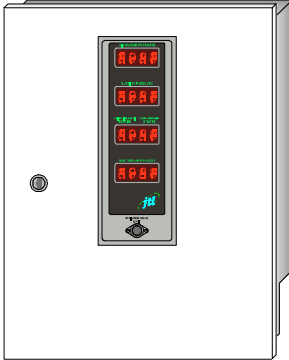


# COMPRESSOR PACK CONTROLLER

# CP5H



Type CP5H is a unit suitable for the control of integrated compressor packs and associated condensing and defrost systems. The unit measures up to **3 suction pressures** and maintains each pressure within adjustable limits by running or stopping compressors or by including or excluding steps of compression as appropriate. The target suction pressures can be adjusted when used in conjunction with a JTL Suction Pressure Optimiser. **Discharge pressure** is also monitored and is maintained within adjustable limits by increasing or decreasing steps of condensing as appropriate.

Type CP5H guards against compressor short-cycling, aims to maintain total running hours for the compressors equal throughout the lifetime of the pack and **monitors fault conditions** on each compressor.

Type CP5H may be used for externally compounded packs with a controlled satellite or standard dual temperature packs.

Up to 6 defrosts per day can be achieved on each of the refrigeration systems associated with the pack by setting a schedule of defrost start times, defrost durations and defrost patterns.

**Compressors, condensers** and **defrosts** are controlled and monitored by connecting JTL compressor pack interface units to CP5H (see separate sheet IFx-x for details).

Suction and discharge pressures together with simple alarm messages are indicated locally on the display. Type CP5H 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.

Can be used with off cycle, electric 2, 3 pipe or ring main gas defrost systems.

## FEATURES

- ◆ Controls up to 10 compressors (up to 4 steps per compressor)
- ◆ Unequal capacity compressor control
- ◆ Short cycle prevention
- ◆ Balanced running hours
- ◆ Controlled start up
- ◆ Satellite control
- ◆ Multiple suction control
- ◆ Supports JTL Suction pressure optimisers
- ◆ Controls up to 7 steps of condensing (12 with bank switching)
- ◆ Variable fan speed control
- ◆ Controls up to 28 defrost systems
- ◆ 6 defrosts a day/system
- ◆ JTL pack interface communication system
- ◆ Pressure and temperature measurement inputs
- ◆ JTL Network communications
- ◆ JTL Network defrost commands
- ◆ 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 probe inputs ..... 7
- ◆ Probe types supported ..... JTL
- ◆ Pressure display drives ..... 4
- ◆ Voltage-free contact outputs ..... 2
- ◆ Optically isolated high voltage inputs ..... 2 (240V max)
- ◆ Data-logging memory capacity ..... 1000 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 (selectable)	Liquid pressure differential valve control/Gas dump
Output 2 (selectable)	Watchdog/Gas regulator/Interstage Valve
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

CP5H-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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