

# COMPRESSOR PACK CONTROLLER

# CPLS

Type CPLS is a unit suitable for the control of integrated compressor packs and associated condensing and defrost systems. The unit measures suction pressure and maintains the pressure within adjustable limits by running or stopping compressors or by including or excluding steps of compression as appropriate. Discharge pressure is also monitored and is maintained within adjustable limits by increasing or decreasing steps of condensing as appropriate.

Type CPLS 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.

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 CPLS (see separate sheet IFx-x for details).

Suction and discharge pressures together with simple alarm messages can be indicated locally using JTL display units. Type CPLS provides comprehensive alarm reporting, data-logging, remote data access and remote control of defrosts at JTL refrigeration controllers when connected to a JTL Communications Unit.

## FEATURES

- ◆ Controls up to 8 compressors (up to 3 steps per compressor)
- ◆ Alarm Communications Sockets
- ◆ JTL pack interface communication system
- ◆ Controls up to 7 steps of condensing or variable fan speed control
- ◆ Default data set-up switches
- ◆ Controls up to 28 defrost systems
- ◆ Non-volatile set-up memory
- ◆ Pressure and temperature measurement inputs
- ◆ Watchdog to ensure reliable operation
- ◆ Pressure, compressor steps, condenser steps and systems on defrost display
- ◆ Battery supported data-logging drives
- ◆ Maintenance Unit Socket

## HARDWARE

- ◆ Pressure transducer inputs ..... 2
- ◆ Temperature probe inputs ..... 7
- ◆ Probe types supported ..... Tempkey
- ◆ Pressure display drives ..... 2
- ◆ Other display drives ..... 2
- ◆ Voltage-free contact outputs ..... 2
- ◆ Voltage-free contact inputs ..... 2
- ◆ Data-logging memory capacity ..... 1000 points on 2 channels



## TECHNICAL SPECIFICATION

|                               |                                                      |
|-------------------------------|------------------------------------------------------|
| Pressure input 1 .....        | Discharge pressure                                   |
| Pressure input 2 .....        | Suction pressure                                     |
| Temperature input 1 .....     | Suction gas temperature                              |
| Temperature input 2 .....     | Discharge gas temperature                            |
| Temperature input 3 .....     | Saturated gas temperature                            |
| Temperature input 4 .....     | Condenser air on temperature                         |
| Temperature input 5 .....     | Condenser air off temperature                        |
| Temperature input 6 .....     | Hot water temperature                                |
| Temperature input 7 .....     | Plant room temperature                               |
| Output 1 .....                | Discharge pressure differential valve control        |
| Output 2 .....                | Saturated gas temperature regulator<br>valve control |
| Relay output rating .....     | 1A resistive (240 V max.)                            |
| Input 1 .....                 | Auto/manual control switch (plant failed)            |
| Input 2 .....                 | Low level liquid switch                              |
| Dimensions .....              | 208 x 194 x 48 mm                                    |
| Weight .....                  | 0.65 kg                                              |
| Power supply (standard) ..... | 240 V 48-62 Hz                                       |
| (optional) .....              | 110 V or 220 V                                       |

## ORDERING INFORMATION

CPLS .....

Printed circuit board only

### Power Supply Options:

For 110 V append - 110 to order code

For 220 V append - 220 to order code

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