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Application Engineering Europe

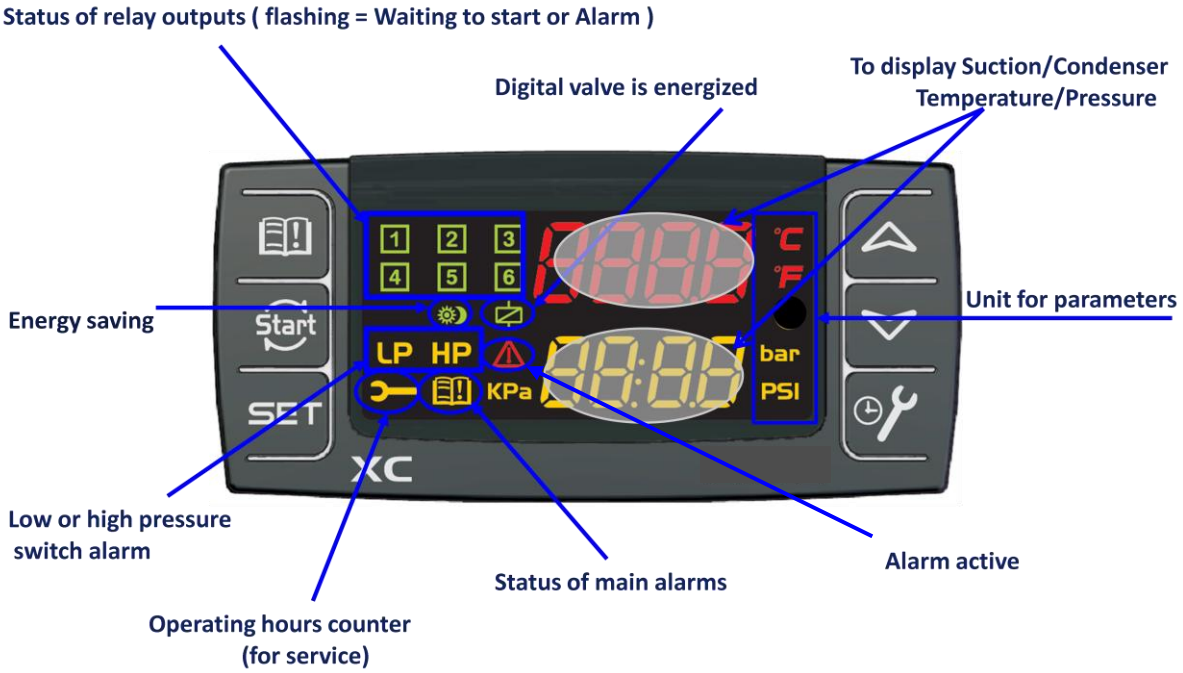
EMERSON® XC645 CONTROLLER FOR COPELAND® CONDENSING UNITS QUICK USER'S GUIDE

1 General

This controller is optimized for operating Copeland® brand condensing units. The parameters are adjusted to meet most standard medium temperature applications using R404A with target evaporation temperature of -10°C.

If controller adjustments are required please follow the procedures as described.

2 Display interface



3 Buttons

4 Menu levels

The controller has two program levels of adjustment:

- Level 1: Stores parameter which are likely to be adjusted, such as compressor and fan set points.
- Level 2: Stores parameters which will not need adjustment for most applications.

5 Display set points for compressor and fan

- Press SET 1x: Display shows compressor set point (Flashing)
- Press SET 2x: Display shows fan set point (Flashing)

6 Changing set points

- Press SET: the compressor set point starts flashing.
- Press ▲ or ▼ to adjust value.
- Press SET again to confirm input.

7 Enter program level 2

- Press SET and ▼ simultaneously for 3 seconds.
- The display shows “**OA6**”. Scroll down with ▼ until the display shows “**PR2**”.
- Press SET: the display shows “**PASS**”.
- Insert “**3210**” using the ▲ and ▼ keys. Press SET to confirm each number.
- Program level 2 is active when the display shows “**OA2**”.
- Parameters in program level 2 can now be displayed by scrolling with ▲ and ▼.
- To exit program level 2: press SET and ▲ simultaneously or wait for 90 seconds without pressing any key.

8 Change display from Pressure to Temperature

- Enter program level 2 (see Section 7).
- Scroll to "**dEU1**" then press SET.
- "**PrS**" (pressure) is flashing; use ⌃ or ⌄ to change to "**tPr**" (temperature).
- Press SET to confirm.
- Repeat the procedure for "**dEU2**".

9 Recommended settings (factory settings)

The default parameter settings are expected to match the most common applications without change.

The list below shows a summary of parameter default settings which may require adjustment.

Name	Value	Program level	Function
SEtc	**3.4**	**Pr1**	**Set point compressor [bar(g)]**
SEtF	**16**	**Pr1**	**Set point fan [bar(g)]**
dEU	**PrS**	**Pr2**	**Set point value pressure/temperature**
dEU1	**PrS**	**Pr2**	**Display value suction**
dEU2	**PrS**	**Pr2**	**Display value condensing**
Pbd	**2.0**	**Pr2**	**Compressor regulation [bar(g)]**
tdS	**15**	**Pr2**	**Cycle time Digital Scroll (sec)**
PM	**20**	**Pr2**	**Min compressor capacity (min 10%)**
PMA	**100**	**Pr2**	**Max compressor capacity (max 100%)**
ton	**60**	**Pr2**	**DGS at max capacity before starting new load (1-255 sec)**
toF	**5**	**Pr2**	**DGS at min capacity before starting new load (1-255 sec)**
OnOn	**5**	**Pr2**	**Min time between two On cycles (0-255 min)**
LAL	**1.5**	**Pr2**	**Pressure alarm suction low [bar(g)]**
HAL	**10.0**	**Pr2**	**Pressure alarm suction high [bar(g)]**
LAF	**4.0**	**Pr2**	**Pressure alarm condensing low [bar(g)]**
HAF	**26.0**	**Pr2**	**Pressure alarm condensing high [bar(g)]**
FtyP	**404**	**Pr2**	**Refrigerant type**

For a more detailed description of the controller please visit www.emersonclimate.eu.