

NO: DATE: TO: FROM: SUBJECT: 09/10 15/04/2010 All Customers Emerson Climate Technologies – Europe Release of Oil Pressure Switch OPS2

Emerson Climate Technologies is introducing the new OPS2 Differential Oil Pressure Switch with important new fail-safe features, further enhancing compressor reliability. OPS2 is fully compatible with the existing OPS1 switch which it will replace. The mechanical sensor element which is pre-installed on all Copeland[®] brand compressors remains unchanged. This allows retrofitting OPS2 on previously produced compressors by just replacing the switch. This bulletin describes the phase-in/phase-out details and explains the new OPS2 features

This change is affecting all Copeland[®] brand semi-hermetic compressors with a positive displacement oil pump and condensing unit lines which are based on such compressors:

- DWM Copeland S-Series Compressors D2S, D3S, D4S, D6S, D8S including their tandem derivatives and including DLHA compressors
- DWM Copeland Discus[™] D2D, D3D, D4D, D6D, D8D including their tandem derivatives
- DWM Copeland Semi-Hermetic Condensing Units based on any of the above compressors

From May 2010 OPS2 will be supplied as accessory for compressors and standard equipment for above mentioned condensing units. From Nov 2010 spare part orders for OPS1 will be automatically converted to OPS2.

Mechanical installation remains unchanged compared to OPS1. Electrically, OPS2 requires the additional input of a compressor run signal from the compressor contactor in order to match OPS1 functionality. By installing additional wires, full functionality with additional features can be obtained. Wiring options for OPS1 replacement and for full OPS2 functionality is available from Emerson Climate Technologies Application Engineering and is also attached to this bulletin. In addition, guidance for replacement of common mechanical differential oil pressure switches can be given on request.

All products equipped with OPS2 will receive a modified compressor wiring diagram.



The table below summarizes the functionality of OPS2 versus OPS1, identifying the new features.

FEATURE	OPS1	OPS2
Differential pressure monitoring with lock-out function and time integration	V	
Time delay		
Connecting cable AWG 18		
UL / CE conformity		
Status LED with fault blink code		
Screw in part compatible (P/N 3110784)		
Reset function		
Anti tie down ¹		
Potential free change over relay – Dry contact (SPDT)		
Dual voltage (115230V)		
Correct assembly check (mechanical &		
electronic)		
Remote alarm reset function		

The outer dimensions of OPS2 are slightly larger than those of the OPS1. Details can be obtained from the available Technical Information shipped with the product and available on the internet.

Ident numbers for OPS2 and OPS1 (to become obsolete) are as follows

Description	Ident	Comment
Switch OPS2 115 + 230V, 50/60HZ	3164918	New
Kit Switch OPS2 w/ Sensor, 115 + 230 V, 50/60 Hz	3168329	New
Sensor w/ gaskets	3110784	Pre-installed on Copeland [®] brand compressors, fits OPS1 and OPS2
Switch OPS1, 230V 50/60Hz	3140721	To be phased out
Switch OPS1, 115V 50/60HZ	3158975	To be phased out
Switch OPS1, 230 V w/ Sensor	3112257	To be phased out
Switch OPS1, 115 V w/ Sensor	3115825	To be phased out

The additional features introduced with OPS2 will come at unchanged prices versus OPS1.

For further information please contact your local Emerson Climate Technologies representative.

¹ Anti tie down: reset button cannot forcibly held pressed to override an alarm condition Emerson Climate Technologies GmbH, Hauptsitz Berlin, Registergericht Berlin-Charlottenburg, HRB 877 B, Geschäftsführung: Torsten Keller-Carnap und Jean Janssen