

# FSE Fan Speed Control Module

Electronic Fan Speed Control Modules FSE generate a 0...10V signal, which is used to control the speed of condenser fan motors in commercial refrigeration and air-conditioning systems. Ideal for use with high efficient EC-motors, but can be also used with phase cut controllers for induction motors.

## Features

- Energy saving due to improved cooling efficiency
- Pressure for minimum speed adjustable
- Small proportional band and large hysteresis to minimize cycling at small pressure changes
- Reduced fan noise level during low ambient temp. conditions
- Improved overall performance of cooling system
- Easy installation with cables for power supply and motor connection factory wired
- IP 65 protection for outdoor mounting
- UL file nr.: E355325 (Released for 43 bar)



FSE Control Modules

## Selection Chart Control Modules FSE

Type	Part No.	Refrigerants	Adjustment Range P <sub>cut</sub> (bar)*	Cut-off Pressure factory set (bar)	Max. operating pressure PS	Test Pressure	Pressure Connection
FSE-01S	804 701	R134a	4 ... 12.5	7.8	27 bar	30 bar	1/16" -20 UNF female
FSE-02S	804 706	R22, R407C, R404A, R507	10 ... 21	15.5	32 bar	36 bar	1/16" -20 UNF female
FSE-03S	804 711	R410A	12 ... 28	20.4	45 bar	50 bar	1/16" -20 UNF female

## Cable Assemblies for connection of FSE Control Module to controller

Type	Part No.	No of leads	Diameter of leads	Temperature Range °C	Cable length mtr.
PS3-N15	804 580	3	0.75 mm <sup>2</sup>	-25/+80	1.5
PS3-N30	804 581				3.0
PS3-N60	804 582				6.0

## Technical Data FSE

Supply Voltage	10V; supplied by controller
Operating current 0...10 VDC output	max. 1 mA
Medium compatibility	HFC, HCFC, POE-, synthetic and mineral oils
Protection class (IEC529/EN 60529)	IP 65 with cable connector assemblies PS3-Nxx

Pressure connection FSE-01S and FSE-02S FSE-03S	Brass Stainless Steel
Weight (approx.)	FSE-01S: 0.125kg FSE-02S: 0.125kg FSE-03S: 0.15kg
Temperature Range Storage and transportation Operation	-30° ... +70°C -20° ... +65°C
Materials Housing cover	PA