

# Electrical control valves series EXN for OEM use, stepper motor driven

## Features

- Unipolar stepper motor
- Bi-flow with same capacity in normal and reverse flow direction
- MOPD: 36 bar in both flow directions
- Unipolar stepper motor with gear mechanism enabling Bi-flow performance at 36 bar differential pressure across the valve
- Removable coil: 12 VDC
- Continuous, linear modulation of mass flow
- High resolution: 2000 pulses (half steps) or 1000 full steps
- Hermetic design



EXN with coil

## Selection table

Type	Description	Part No.	Nominal Capacity (kW)				Connections Size / Style
			R410A	R32	R134a	R407C	
EXN-B2K	Valve less coil	800421	34.0	50.6	22.2	30.7	1/2" ODF
EXN-B2L	Valve less coil	800422	42.0	62.5	28.8	37.9	1/2" ODF
EXN-125	Coil 12 VDC	800420	-	-	-	-	-

**Note 1:** Nominal conditions: Evaporating Temperature +4°C (dew point), Condensing Temperature +38°C (bubble point), Subcooling 1 K

**Note 2:** For the selection of other operation conditions, please use Copeland Select software.

## Technical data

MOPD (Maximum Operating Pressure Differential)	36 bar in Normal Flow 36 bar in Reverse Flow
Max. allowable pressure PS	45 bar
Temperature range TS - liquid refrigerant - Ambient	-30...+70°C -30...+60°C
Stepper motor type	Uni-Polar, Constant Voltage, 5 Wires
Supply voltage	12 VDC Coil: 12 V ± 10%

Total number of pulses	2000 half step (1000 full step)
Pulsing rate frequency (pulse/sec.)	100...200 Hz
Full travel time	20 s at 100 Hz 10 s at 200 Hz
Coil insulation class	A
Cable length	1 m
Electrical connection	JST XH connector, 5 pole Housing: XHP-5 Pin: SXH-001T-P0.6