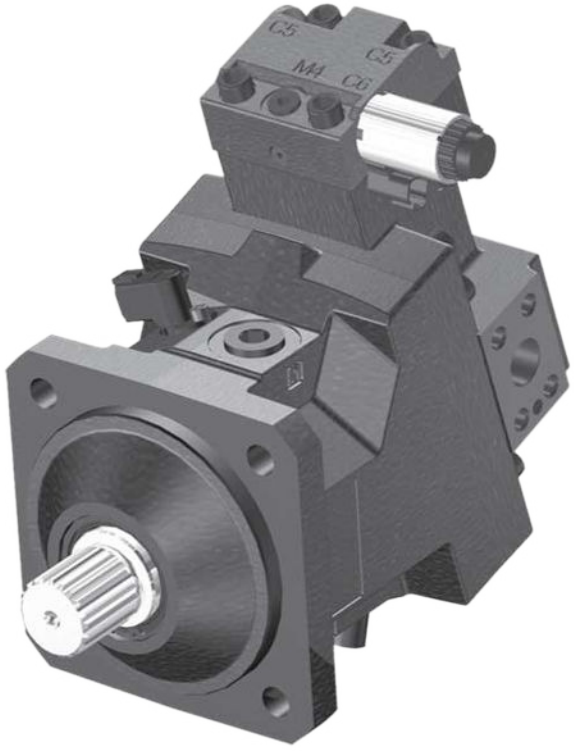
ENGINEERING
TOMORROW

Electrical Installation

E1, E2 Electric Two-Position Controls
for H1B Bent Axis Motors



Revision history

Table of revisions

Date	Changed	Rev
September 2018	Major update.	0301
September 2015	Converted to Danfosss layout.	0201
July 2009	First edition.	0101

Contents

Product overview

Electric two-position controls....4
Nomenclature....4
Latest version of technical literature....4
E1AA and E2AA options....5

Electrical installation

2-pin DEUTSCH connector pinout....6
Pin compatibility....6
Mating connector parts list....6

Product overview

Electric two-position controls

The electric two-position control consists of an off/on-solenoid which acts on a two position, three-way porting spool. Servo pressure is internally supplied to the two-position porting spool by an integral system pressure shuttle.

De-energized = maximum displacement

When the solenoid is de-energized, the motor runs at maximum displacement. When energized, the solenoid applies a force on the spool which ports high pressure to the larger diameter of the servo piston and strokes the motor to minimum displacement. When the solenoid is de-energized, the motor strokes back to maximum displacement.

De-energized = minimum displacement

When the solenoid is de-energized, the motor runs at minimum displacement. When energized, the solenoid applies a force on the spool which ports the larger diameter of the servo piston to tank, and strokes the motor to maximum displacement. When the solenoid is de-energized, the motor strokes back to minimum displacement.

Nomenclature



B – E1, E2 Controls

Code	Description
E1	Electric two-position control, 12 V, DEUTSCH DT 04-2P connector, de-energized = maximum displacement, without PCOR
E2	Electric two-position control, 24 V, DEUTSCH DT 04-2P connector, de-energized = maximum displacement, without PCOR

C – E1, E2 Control options

Code	Description
AA	Without brake pressure defeat
AA	Without brake pressure defeat

Only certain control options for the H1B motor use this electric two-position control. Please refer to the motor's nomenclature to determine if the motor is equipped with the proper option. You can find the nomenclature on the motor's nametag. For nomenclature details, refer to *H1B Bent Axis Variable Displacement Motors Technical Information*, **BC00000043**.

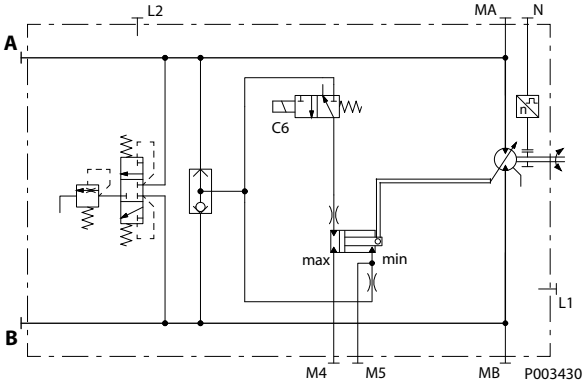
Latest version of technical literature

Danfoss product literature is online at: *https://www.danfoss.com/en/search/*

Product overview

E1AA and E2AA options

E1 – electric two-position 12 V / **de-energized = max. displacement**
E2 – electric two-position 24 V / **de-energized = max. displacement**
AA– without Pressure Compensator Over Ride / without Brake Pressure Defeat



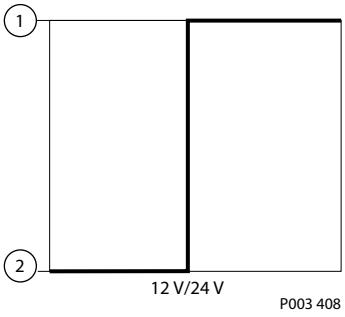
Options E1AA, E2AA



Solenoid C6
De-energized = max. displacement
Energized = min. displacement

A, B	Main pressure lines
L1, L2	Drain lines
M4, M5	Gauge port servo pressure
MA, MB	Gauge port system pressure
N	Speed sensor (optional)

Displacement versus control signal



Where:

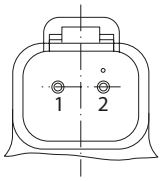
1 Minimum displacement
2 Maximum displacement

Two-position control solenoid C6 technical data

Description		12 V	24 V
Supply voltage	Minimum	9.5 V_{DC}	19 V_{DC}
	Max. (continuous)	14.6 V_{DC}	29 V_{DC}
Nominal coil resistance @ 20 °C [68 °F]		8.4 Ω	34.5 Ω
Input current	Recommended	1050 mA	500 mA
IP Rating	IEC 60 529	IP 67	
	DIN 40 050, part 9	IP 69K with mating connector	
Bi-directional diode		yes	
Connector color		Blue	

Electrical installation

2-pin DEUTSCH connector pinout



1. Voltage signal
2. Ground
Alternative pinout:
1. Ground
2. Voltage signal

Pin compatibility

PLUS+1® module pin type/ H1B E pin compatibility

Pin	Function
1, 2	PWMOUT/DOUT/PVG Power supply
1, 2	PWMOUT/DOUT/PVGOUT
1, 2	Power ground

Mating connector parts list

Connector ordering data

Description	Quantity	Ordering number
Mating connector	1	DEUTSCH DT06-2S
Wedge lock	1	DEUTSCH W2S
Socket contact (16 and 18 AWG)	2	DEUTSCH 0462-201-16141
Danfoss mating connector kit	1	K29657

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Local address:

Danfoss
Power Solutions (US) Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss
Power Solutions GmbH & Co. OHG
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss
Power Solutions ApS
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss
Power Solutions Trading (Shanghai) Co., Ltd.
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200

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