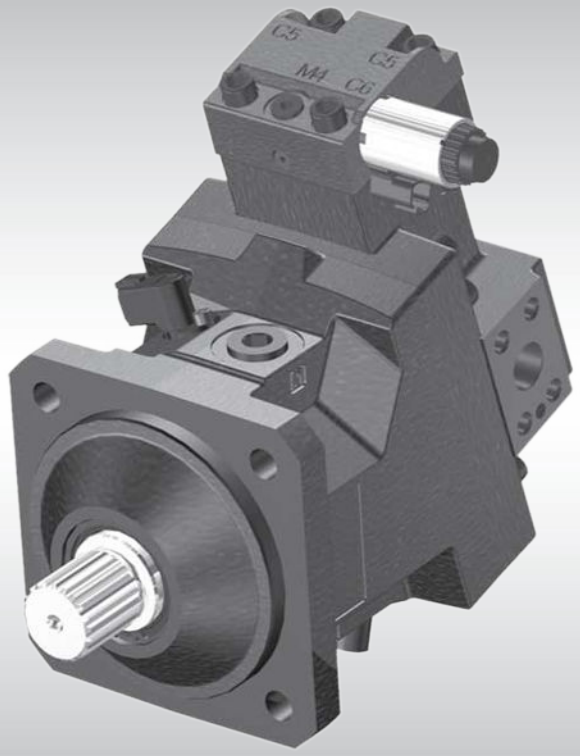
MAKING MODERN LIVING POSSIBLE

Electrical Installation

H1B Motor Two-Position Control

E1, E2



Revision history

Table of revisions

Date	Changed	Rev
July 2015	Converted to Danfoss layout	BB
May 2013	Description in B and C Module - Control Options revised	BA
April 2009	Title changed to H1B Motor....	AC
March 2009	Reference	AB
February 2009	First edition	AA

Contents

Literature references

H1B motor electric two-position control E1, E2 literature references

Literature title	Description	Literature number
H1B Bent Axis Variable Displacement Motors	Complete product electrical and mechanical specifications	*11037153*
PLUS+1® Compliant On/Off Functions Function Block	Compliant function block set-up information	*11022918*

Latest version of technical literature

Danfoss product literature is online at: *http://powersolutions.danfoss.com/literature/*

Product overview

Product image

E1AA, E2AA

Nomenclature

B and C module - control options

B	Description	C	Description
E1	Electric two-position control, 12 V, DEUTSCH DT 04-2P connector, de-energized = maximum displacement, without PCOR	AA	Without brake pressure defeat
E2	Electric two-position control, 24 V, DEUTSCH DT 04-2P connector, de-energized = maximum displacement, with PCOR	AA	Without brake pressure defeat

Only certain control options for the H1B motor use the 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* http://files.danfoss.com/documents/11037153.pdf.

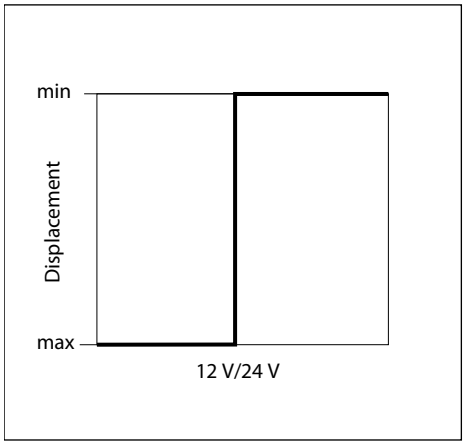
Product overview

Theory of operation

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

- Solenoid de-energized = maximum displacement
- Solenoid energized = minimum displacement

Electric two-position control 12 V/24 V



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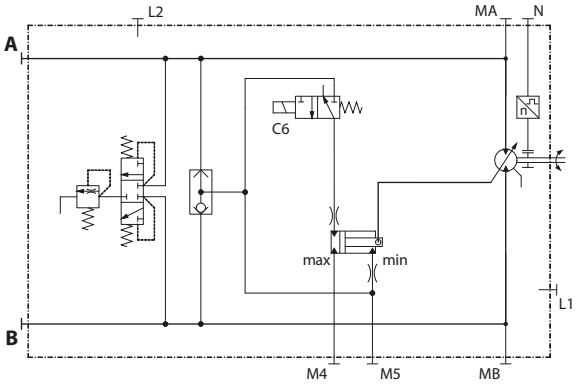
Hydraulic schematic

Motor with electric two-position control E1AA, E2AA circuit diagram



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

Product overview

Electrical specifications

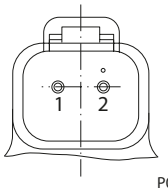
Two-position solenoid data C6

Specification	E1	E2
Voltage	12 V	24 V
Minimum supply voltage	9.5 Vdc	21.1 Vdc
Maximum supply voltage (continuous)	14.6 Vdc	29.0 Vdc
Nominal resistance at 20° C (70° F)	8.4 Ω	34.5 Ω

Electrical installation

Pinout

Pin location



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Pinout, two-position control solenoid

Pin	Description
1	Ground
2	Voltage signal

Alternative pinout

Pin	Description
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

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
Mating connector kit	1	Danfoss: K29657

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