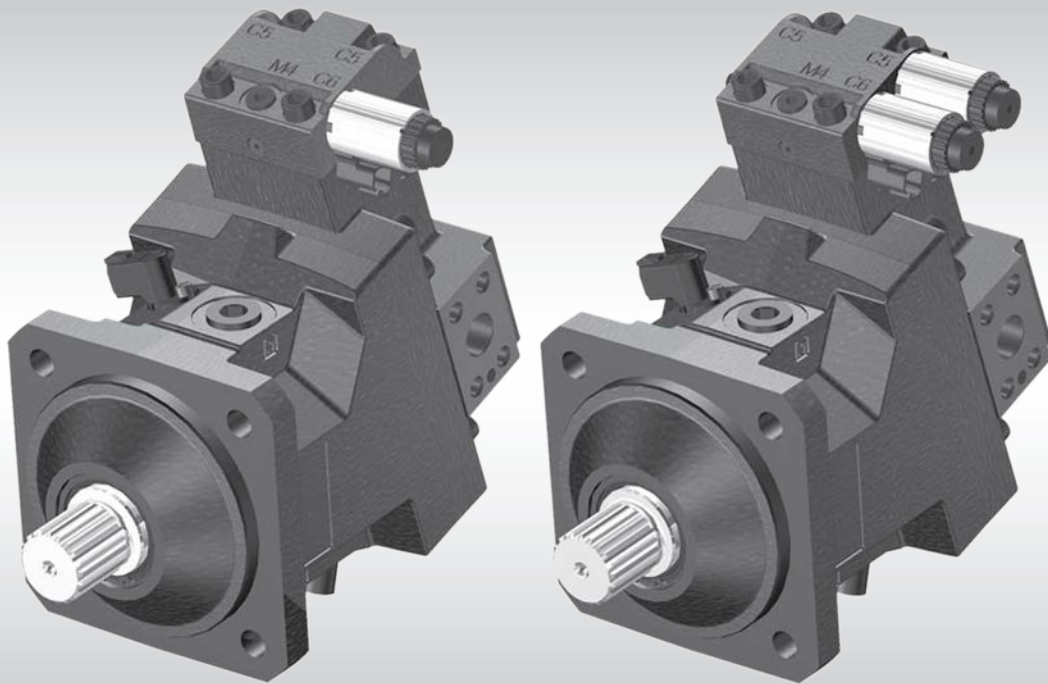


Electrical Installation

H1B Motor Two-Position Control T1, T2



Electrical Installation H1B Motor Two-Position Control T1, T2

Revision history*Table of revisions*

Date	Changed	Rev
June 2015	Converted to Danfoss layout	BA
February 2009	First edition; then minor updates in March and April 2009	AA

Electrical Installation H1B Motor Two-Position Control T1, T2

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Electrical Installation H1B Motor Two-Position Control T1, T2

Literature references**H1B motor electric two-position control T1, T2 literature references**

Literature title	Description	Literature number
<i>H1B Bent Axis Variable Displacement Motors</i>	Complete product electrical and mechanical specifications	11037153
<i>PLUS+1° Compliant On/Off Functions Function Block</i>	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

Theory of operation

T1XX, T2XX

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

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

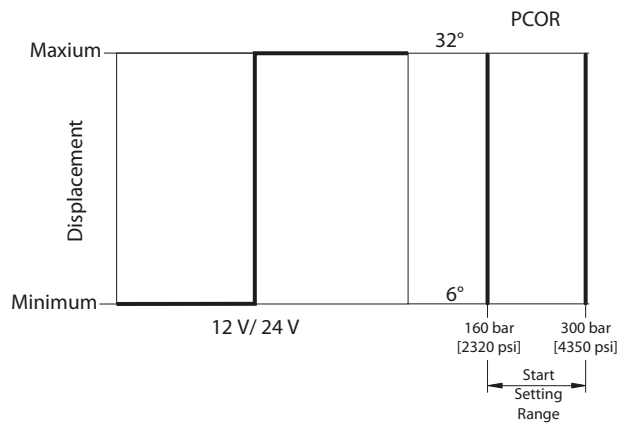
TXD1, TXD2 with BPD

For propel applications, use the electric brake pressure defeat (BPD) option in conjunction with the pressure compensator override (PCOR) option. The BPD shuttle valve is located ahead of the pressure compensator control valve. The BPD defeat consists of an electric off/on solenoid and a two-position, three-way porting spool. The applied logic allows the pressure compensator control to operate normally with high loop system pressure during acceleration and cuts off the supply pressure during deceleration or overrun. This prevents rapid or uncontrolled deceleration while the machine is slowing down. With the BPD solenoid de-energized, spring force centers the porting spool. A direction lever switch or a microcontroller output signal must control the BPD solenoid.

TXDA without BPD

The pressure compensator functions all the time. There is no electric brake pressure defeat (BPD) feature.

Electric two-position control with pressure compensator override



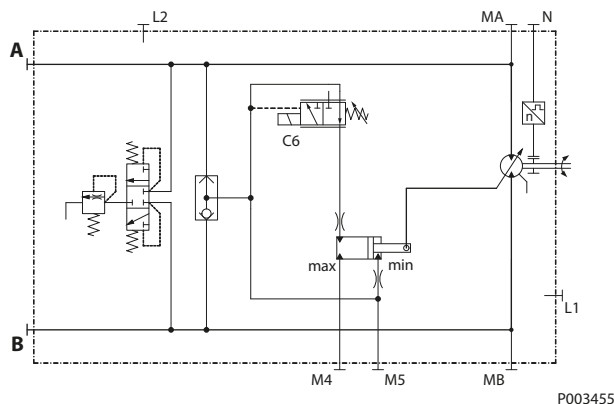
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Electrical Installation H1B Motor Two-Position Control T1, T2

Product overview

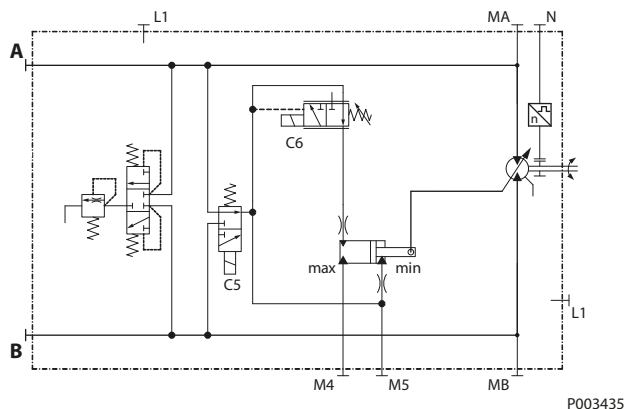
Hydraulic schematics

Motor with electric two-position control T1DA, T2DA circuit diagram



This control is not for use in propel applications.

Motor with electric two-position control and electric brake pressure defeat T1D1, T2D2 circuit diagram



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

Electrical specifications

Two-position solenoid data C6 and C5

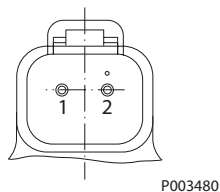
Specification	T1, D1	T2, D2
Voltage	12 V	24 V
Minimum supply voltage	9.5 Vdc	21.1 Vdc
Maximum supply voltage (continuous)	14.6 Vdc	29.0 Vdc
Nominal resistance at 20° C (70° F)	8.4 Ω	34.5 Ω

Electrical Installation H1B Motor Two-Position Control T1, T2

Electrical installation

Pinout

Two-position control and electric brake pressure defeat solenoid pin location



Pinout

Pin	Function
1	Voltage signal
2	Ground

Alterantive pinout

Pin	Function
1	Ground
2	Voltage signal

Pin compatibility

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

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

PLUS+1® module pin type/ H1B D1, D2 EBPD 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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