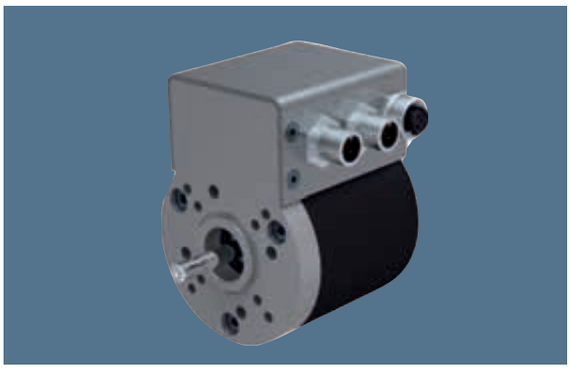
VDC-3-49-15

with electronics module K5

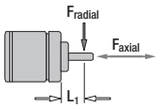


- Completely integrated operation and control electronics “K5” with CANopen communication interface and programming functionality
- Sine commutation of the drive based on field oriented control (FOC) and 4-quadrant operation
- Speed control range down to n=0 rpm with holding torque
- Different modes of operation based on DSP 402 standard (speed, position, homing, torque) through CANopen interface
- Electronics-module in IP 54 version
- Connector system in sealed M12 industry standard
- Interface with digital inputs

Nominal data

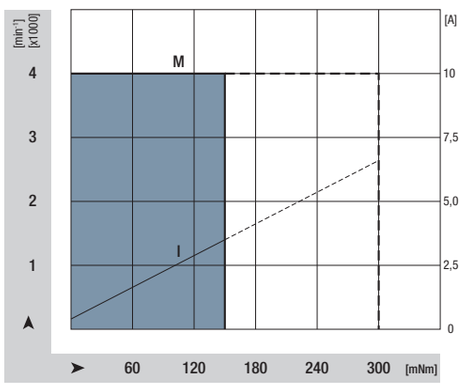
Type		VDC5-3-49.15 B00
Nominal voltage (U_N)	V DC	24
Permissible supply voltage range (U_{ZK})	V DC	18 to 30
Nominal speed (n_N)	rpm	4 000
Nominal torque (M_N)	mNm	150
Nominal current (I_N)	A	3,5
Nominal output power (P_N)	W	63
Speed at no-load operation (n_L)	rpm	4 000
No-load current (I_L)	A	0,4
Max. reverse voltage	V DC	36,7
Set value input		Can Bus
Set speed	rpm	0 … 4 000
Recommended speed control range	rpm	0 … 4 000
Locked-rotor protection		thermal
with locked-rotor protection clock		no
Overload protection		yes
Starting torque	mNm	300
Rotor moment of inertia (J_R)	kgm^2x10^{-6}	108
Thermal resistance (R_{th})	K/W	–
Protection class		IP 54*
Ambient temperature range (T_U)	°C	0 … +40
Motor mass (m)	kg	0,59
Order No.		-

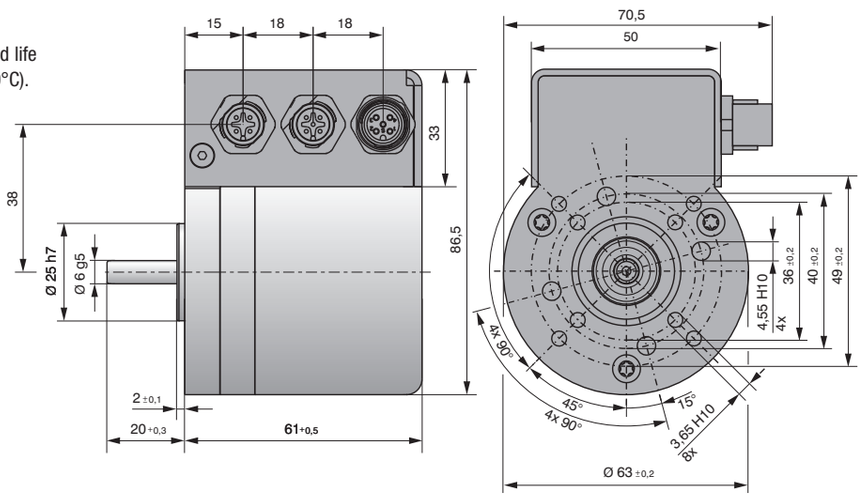
* Type of protection specified pertains to installed state with seal on the flange side.



F_{axial} 20 N
F_{radial} 60 N L_1 10 mm

Permissible shaft load at nominal speed and life expectancy L_{10} at 20 000 h (at T_U max. 40°C).





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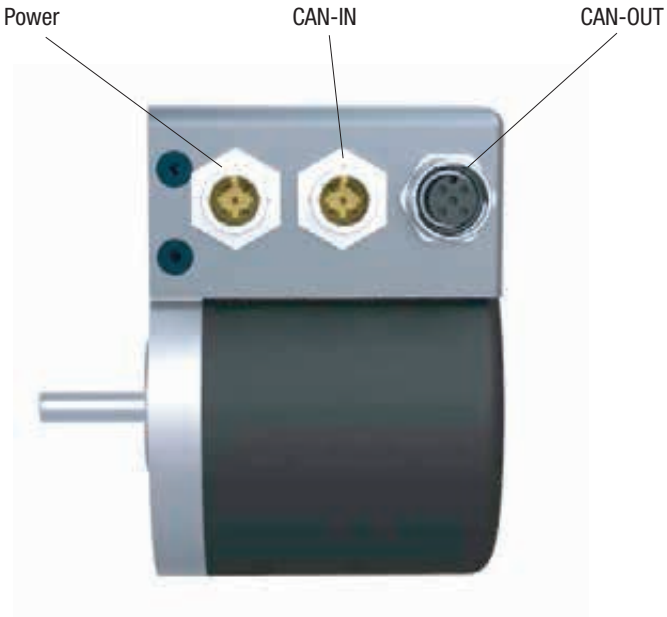
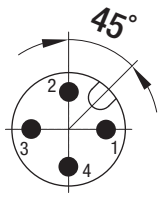
Description of connection interface with electronics module K5

The VDC-3-49.15 with built-on electronics module K5 is an extremely compact drive unit.
With the CANopen interface, the extensive functionality and the robust design the motor is suitable for a large variety of applications such as automated format adjustments or torque-controlled winder drives.

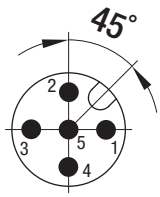


Power:



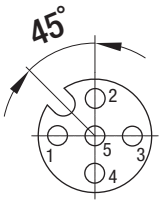
Pin 1	UZK	Power supply motor
Pin 2	GND	Power/ logic supply
Pin 3	UB	Logic supply
Pin 4	IN 1	Digital input

CAN-IN:



Pin 1	n.c.	
Pin 2	IN 2	Digital input
Pin 3	CAN-GND	CAN-GND
Pin 4	CAN_H	CAN High Signal
Pin 5	CAN_L	CAN Low Signal

CAN-OUT:



Pin 1	n.c.	
Pin 2	IN 3	Digital input
Pin 3	CAN-GND	CAN-GND
Pin 4	CAN_H	CAN High Signal
Pin 5	CAN_L	CAN Low Signal