

HFI 26

		HFI 2630	HFI 2660	
type		-	-	
series		-	-	
max. speed	rpm	5000	4000	
bus voltage	VDC	24 / 48	24 / 48	± 20%
nominal speed	rpm	4000	3000	
nominal current ²⁾	ADC	8,8 / 4,4	10,6 / 5,3	
nominal power ^{2) *)}	W	150	190	
operation acc. to VDE 0530		S1		
protection acc. to VDE 0530		IP 54		
rotating direction		reversible		
structural shape acc. to VDE 0530		IM B5 - with alignment by end plate		
kind of connection		connectors (see below)		
mechanical data:				
moment of inertia motor	kgm ²	0,009*10 ⁻³	0,018*10 ⁻³	
nominal torque ^{2) *)}	Nm	0,36	0,61	
peak torque ^{*)}	Nm	0,75	1,3	
speed regulation constant	N ⁻¹ cm ⁻¹ rpm	19	7	
mechanical time constant	ms	2	1,5	
friction torque	Nm	0,035	0,035	
rotor weight	kg	0,18	0,30	
total weight	kg	1,2	1,6	
ball bearings	A/B-side	6000/608	6000/608	
F _R (allowable radial shaft load) ³⁾	N	100	100	
F _A (allowable axial shaft load)	N	40	40	
electrical data:				
number of phases		3	3	
number of poles		6	6	
terminal resistance ⁴⁾	Ω	0,18 / 0,75	0,11 / 0,43	
inductance ⁴⁾	mH	0,16 / 0,62	0,11 / 0,44	
voltage constant ^{1) *)}	V/1000 rpm	3,6 / 7,0	4,4 / 8,8	
torque constant ^{1) *)}	Nm/A	0,030 / 0,058	0,036 / 0,073	
electrical time constant	ms	0,9	1,0	
thermal data:				
ambient temperature range	°C	0 ... 40	0 ... 40	
isolation acc. to VDE 0530		F	F	
thermal time constant	min	15	20	
temperature-rise n.v.	K/W	0,85	0,82	
parking brake:				
static brake torque	Nm	2	2	automatically activated
power	W	10	10	
mass moment of inertia	kgm ²	0,0068*10 ⁻³	0,0068*10 ⁻³	
motor weight incl. parking brake	kg	1,45	1,85	
signal interfaces:				
analogue input ⁵⁾	AE1	± 10V, 12Bit, Ri=22kOhm		setpoint setting
digital inputs ⁵⁾	DE1 ... DE8	0,0V ≤ U _{off} ≤ 5,0V 15,0V ≤ U _{on} ≤ 30V		DE1 = enable DE2 ... 8 = function partly configurable
digital outputs ⁵⁾	DA1 DA2	24V, 50mA, o.C.		function configurable e.g. ready, speed indication...
serial interfaces	RS232	max. 115200Baud		for „DSerV“ software communication
	(optionally) CANopen (optionally) field bus (optionally) safety	max. 1Mbit/s, ISO11898 EtherCAT, PROFINET, EtherNet/IP Safe Torque Off (STO)		Ethernet-based acc. to Performance-Level [e], cat. 3; SIL-3
connectors:				
angled connector, rotatable 300°		Serie 915 itec (INTERCONTEC)		power + I/O + RS232
angled connector, rotatable 300°	(optionally)	Serie 615/915 ytec (INTERCONTEC)		power + I/O + RS232 + CANopen
flange connector	Motor (optionally) field bus (optionally) safety (optionally)	series 915 connector, 15-pol. (INTERCONTEC) 2 x M12 socket, 4-pole, D coded M12 plug, 8-pole, A coded		power + I/O + RS232 fieldbus 1 + fieldbus 2 STO

*) Tolerance -10 %

¹⁾ Sinusoidal-peak

²⁾ Values are valid for a drive mounted to an aluminium panel (heat sink) of at least 0,15 m² at a thickness of 10 mm. For versions with gearbox, with integrated parking brake or with radial shaft seal the values are reduced.

³⁾ Center of the shaft-extension.

⁴⁾ Measured between two phases.

⁵⁾ Selective functions: AE1 ↔ DE6, DA1 ↔ DE5, DA2 ↔ DE4.

order code:

HFI26XX-XXXX-XX-...-XX

HB = parking brake, GP = planetary gear,
CO = CANopen, EC = EtherCAT
PN = PROFINET, EI = EtherNet/IP

00 = standard version
XX = customized version

2 = 24VDC operation voltage
4 = 48VDC operation voltage

S = functional safety STO
N = non safety

30 = HFI 2630
60 = HFI 2660

Accessories (optional):

- supply / signals cable assembled 2m / 5m
- CAN cable assembled 6m
- fieldbus cable assembled 5m
- STO cable assembled 5m

HFI 26

hybrid connector for power + I/O + RS232

signals: power supply 24/48VDC
digital/analogue inputs/outputs
serial interface RS232

connector: hybrid plug series 915
15-pole (12+3) (INTERCONTEC)

connector 15-pole
series 915



connecting side
of connector

pin assignment

A -	+Ub
B -	0V
C -	+Ubl
1 -	DE1
2 -	DE2
3 -	DE3
4 -	DA1/DE5
5 -	DA2/DE4
6 -	AE1 +
7 -	AE1 -/DE6
8 -	GND
9 -	DE7
10 -	TxD
11 -	RxD
12 -	DE8

field bus options

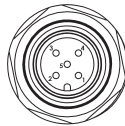
CANopen®:

profiles: CiA 301
CiA 402 drive profile

interface: galvanically isolated

connector: M12 plug 5-pole, A coded

M12 plug
5-pole, A coded



connecting side
of connector

pin assignment

1 -	CAN_SHLD
2 -	free
3 -	CAN_GND
4 -	CAN_H
5 -	CAN_L

EtherCAT (fieldbus module):

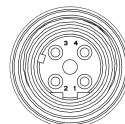
profiles: CANopen over EtherCAT (CoE)
CiA 402 drive profile

status indicators: 2 x LEDs
Module Status, Network Status

features: Integrated 2-Port-Switch

connector: 2 x M12 socket 4-pole, D coded

M12 socket
4-pole, D coded



connecting side
of connector

pin assignment

1 -	TX+
2 -	RX+
3 -	TX-
4 -	RX-

recommended cable type Cat.5e (min.)

PROFINET (fieldbus module):

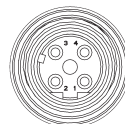
profiles: PROFINET Conformance
Class A, B and C
PROFIDRIVE

status indicators: 2 x LEDs
Module Status, Network Status

features: Integrated PROFINET IRT Switch

connector: 2 x M12 socket 4-pole, D coded

M12 socket
4-pole, D coded



connecting side
of connector

pin assignment

1 -	TX+
2 -	RX+
3 -	TX-
4 -	RX-

recommended cable type Cat.5e (min.)

EtherNet/IP (fieldbus module):

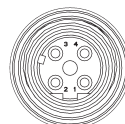
profile: Generic (CIP)

status indicators: 2 x LEDs
Module Status, Network Status

features: Integrated 2-Port-Switch

connector: 2 x M12 socket 4-pole, D coded

M12 socket
4-pole, D coded



connecting side
of connector

pin assignment

1 -	TX+
2 -	RX+
3 -	TX-
4 -	RX-

recommended cable type Cat.5e (min.)

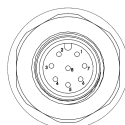
option Safe Torque Off (STO)

- SIL-3 acc. to EN 61508, EN 62061
- Performance-Level [e], Category 3 acc. to
EN ISO 13849-1

supply: 20,4 ... 28,8 VDC / max. 30 mA

connector: M12 plug 8-pole, A coded

M12 plug
8-pole, A coded

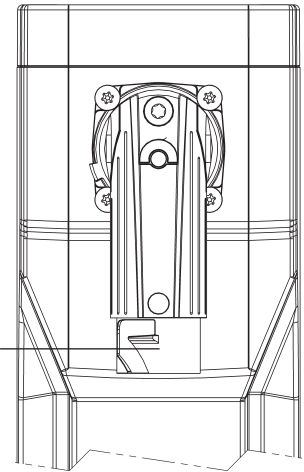


connecting side
of connector

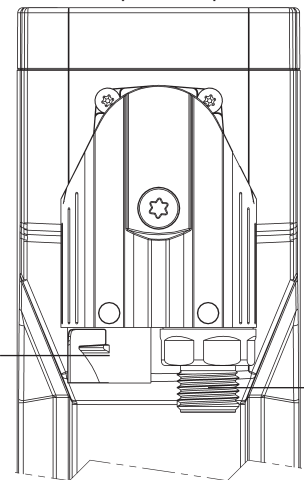
pin assignment

1 -	Status+
2 -	Status-
3 -	STO1 -
4 -	STO1 +
5 -	free
6 -	STO2 +
7 -	STO2 -
8 -	free

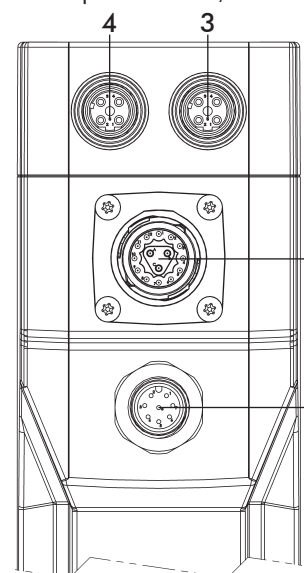
standard configuration



with option CANopen



with option fieldbus and/or STO



connectors:

- 1 power + I/O + RS232
- 2 CANopen
- 3 fieldbus 1 (in)
- 4 fieldbus 2 (out)
- 5 STO