

Integrated Drives Series HFI

**Integrated
Synchronous
Servo Drives**



- **New, powerful drive series with integrated electronics**
 - **Variable fieldbus connection**
 - **Functional safety STO (Safe Torque Off)**

Preliminary overview of types:

Type:	Rated Torque [Nm]	Rated Speed *) [rpm]	Peak Torque [Nm]	Max. Speed [rpm]	Rated current *) [ADC]	Rated Power *) [W]	Flange Dimensions [mm ²]
HFI 2230	0,23	4000	0,50	5000	6,1 / 3,0	95	47 x 47
HFI 2260	0,38	3000	0,80	4000	7,1 / 3,6	120	47 x 47
HFI 2630	0,36	4000	0,75	5000	8,8 / 4,4	150	55 x 55
HFI 2660	0,61	3000	1,30	4000	10,6 / 5,3	190	55 x 55
HFI 3260	0,95 / 1,00	2600 / 3000	2,00	4000	14,0 / 8,0	260 / 315	65 x 65
HFI 3290	1,40	3000	3,00	4000	- / 10,8	440	65 x 65
HFI 3760	1,40	3000	3,00	4000	- / 10,7	440	75 x 75
HFI 3790	1,80	3000	4,00	4000	- / 13,4	565	75 x 75

*) The mentioned values are valid for 24 / 48VDC versions.

- Versions for operation at 24VDC or 48VDC
- High-resolution 12Bit aquisition of rotor position
- Available fieldbuses: CANopen, EtherCAT, PROFINET, EtherNet/IP
- Optional with integrated safety function Safe Torque Off (STO)
- Available with permanent magnet parking brake
- Available with planetary gear
- Protection class IP54
- Customized versions

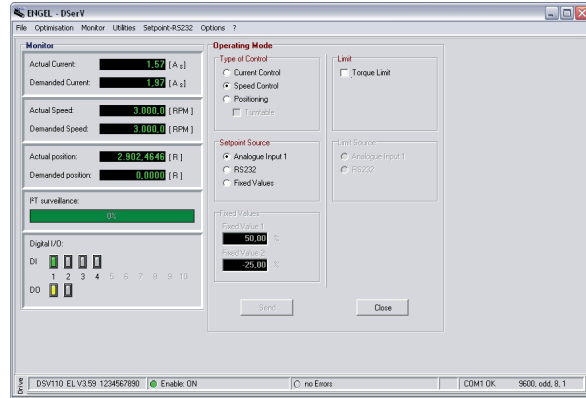
edition 10.20

In- and outputs for integrated drives HFI:

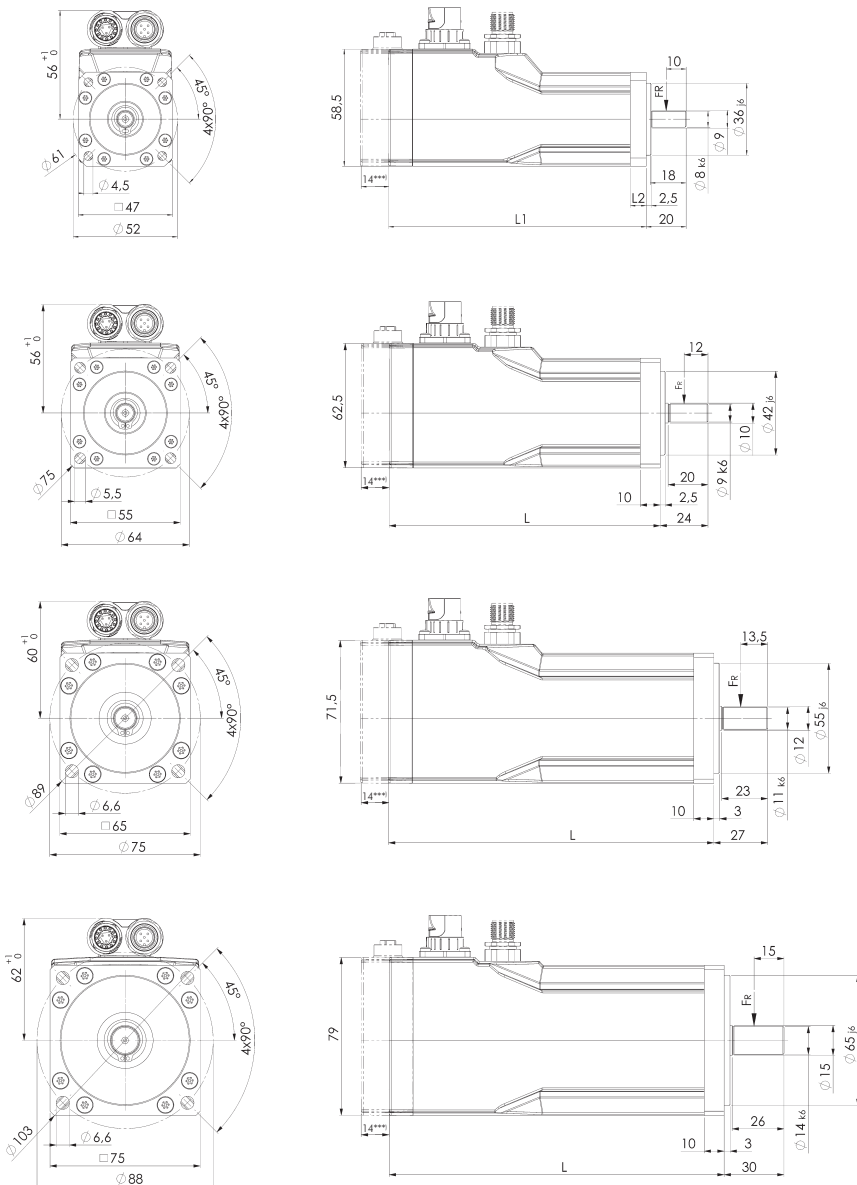
- 5 (8) digital inputs 24V/10kOhm
 - 2 digital outputs 24V/0,05A, o.C.
 - 1 analogue input $\pm 10V$ 12Bit
 - Status displays
 - Serial interface RS232
 - Field busses (optional) **)
 - Safety function (optional) **)
- Control enable, setpoint invers, setpoint=0, ...
 - configurable outputs for speed indication, ready indication, ... (also useable as digital inputs)
 - Differential input for setpoint setting (speed/current) (also useable as digital input)
 - Displays for enable-/drivestatus, error codes and field bus status (visible at rear side)
 - Communication PC/Laptop via DSeRV
CANopen, EtherCAT, PROFINET, EtherNet/IP
Safe Torque Off (STO)
- **) Additional information on page 3.

DSeRV parametrizing software:

DSeRV is an intuitive software for easy configuration of the HBI integrated drives. Fundamental informations about the drive status like speed, current, enable etc. can be observed at a single glance. Scalings, limitations, operating methods are adjustable via menu. The device settings can be stored on the hard disk of the computer. The program language can be selected between German, English and French. The software is designed for MS-Windows. The communication to the drive is done via serial interface RS232.



Drawings:



***) Option fieldbus module.

Motor type	Dimension	
	L1	L2
HFI 2230 N200	129	8
HFI 2230 N200-HB	161	10
HFI 2260 N200	159	8
HFI 2260 N200-HB	191	10

Motor type	Dimension
	L
HFI 2630 N200	136
HFI 2630 N200-HB	166
HFI 2660 N200	166
HFI 2660 N200-HB	196

Motor type	Dimension
	L
HFI 3260 N200	163
HFI 3260 N200-HB	193
HFI 3290 N200	193
HFI 3290 N200-HB	223

Motor type	Dimension
	L
HFI 3760 N200	168
HFI 3760 N200-HB	198
HFI 3790 N200	198
HFI 3790 N200-HB	228

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)

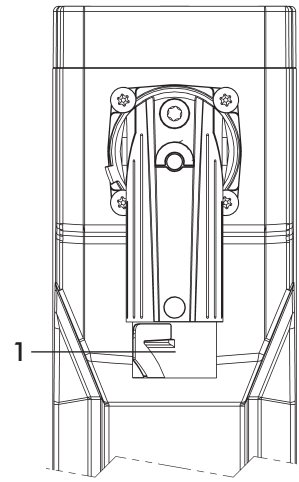
connector 15-pole
series 915



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

standard configuration



field bus options

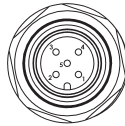
CANopen®:

profiles: CiA 301
CiA 402 drive profile

interface: galvanically isolated

connector: M12 plug 5-pole, A coded

M12 plug
5-pole, A coded

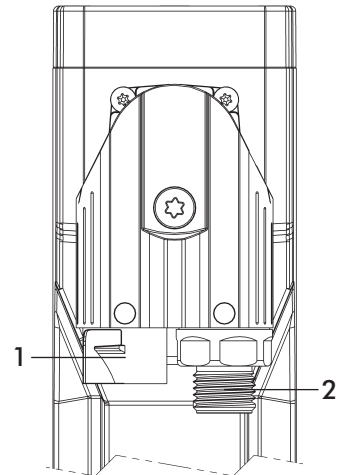


connecting side
of connector

pin assignment

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

with option CANopen



EtherCAT (fieldbus module):

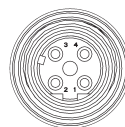
profiles: CANopen over EtherCAT (CoE)
CiA 402 drive profile

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):

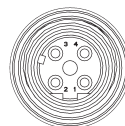
profiles: PROFINET Conformance
Class A, B and C
PROFIDRIVE

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):

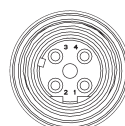
profile: Generic (CIP)

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



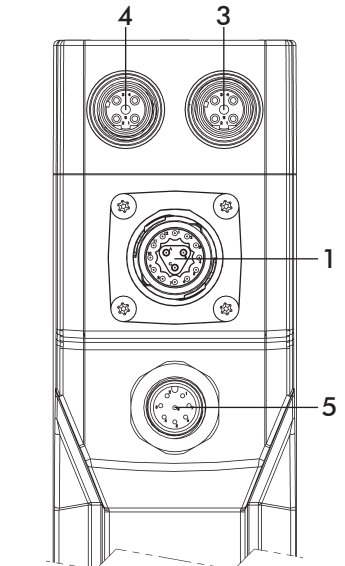
connecting side
of connector

pin assignment

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

recommended cable type Cat.5e (min.)

with option fieldbus and/or STO



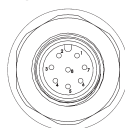
option Safe Torque Off (STO)

certifications:
- 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

connectors:

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