

■ HCB

Servo drive

Connections / inputs and outputs

Connection	Function
X1	I/O communication
X2A	Resolver connection
X2B	Multi-encoder connection
X3	STO interface (STOA, STOB), limit switch (DIN6, DIN7) Dig. output (DOUT0)
X4	CANopen
X5	RS232/RS485 / Serial interface
X6	Motor connection
X6A	Motor brake / HIPERFACE DSL® (BL 4300-C)
X9	Voltage supply
X9A	Brake resistor
X9B	24V supply
X18	Ethernet interface
X19	USB interfae
X21	Realtime Ethernet interface

Ambient conditions

Ambient temperature in operation:	0 °C to +40 °C +40 °C to +50 °C with power reduction 2.5 %/K
Storage temperature:	-25 °C to +70 °C
Operating and storage humidity:	relative humidity 90 % (without condensation)
Protection class:	IP20
Installation altitude:	Mounting height max. 2000 m above sea level, above 1000 m above sea level with power reduction 1 % per 100 m

Functions*

- Safety function „Safe Torque-Off (STO)
- Realization of functionality SS1 possible
- Switching cams
- Safe Brake Control (SBC) if configured
- Direct control of the holding brake in the motor
- Automatic determination of motor parameters
- Flying Saw
- Path program / linking
- Integrated position control
- Parameterizable belt locks

* Some functions are not available for all models

Power Cable

Length	Heidrive-Nr.
3 m	14-007-051-18-0
5 m	14-007-051-19-0
10 m	14-007-051-23-0

Signal cable (resolver)

Length	Heidrive-Nr.
3 m	14-007-051-60-0
5 m	14-007-051-62-0
10 m	14-007-051-67-0

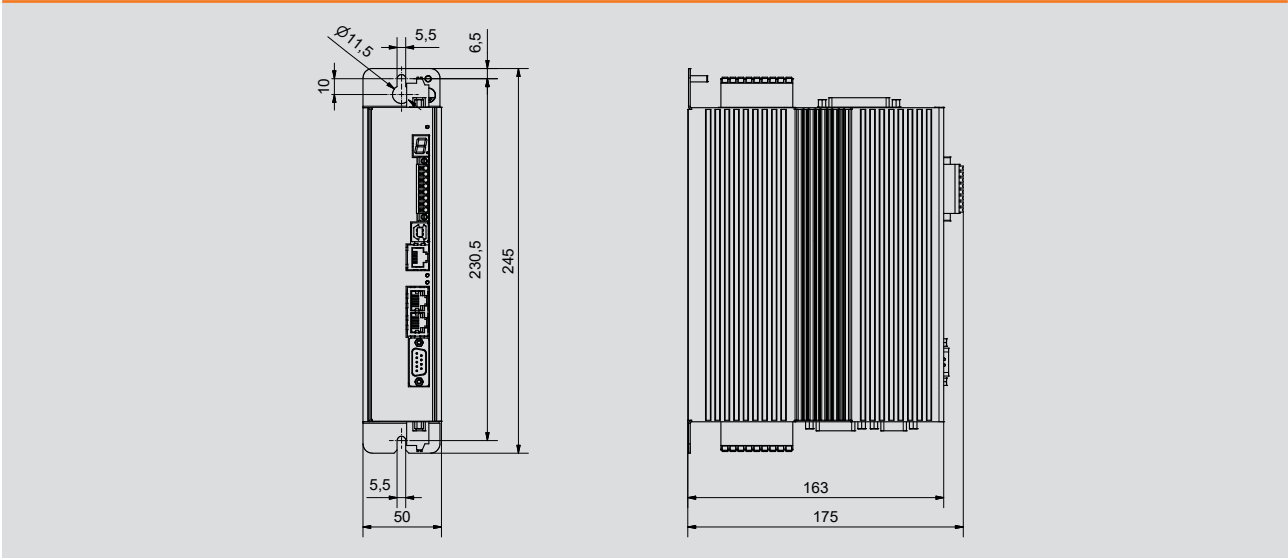
Signal cable (HIPERFACE)

Length	Heidrive-Nr.
3 m	14-007-051-78-0
5 m	14-007-051-80-0
10 m	14-007-051-85-0

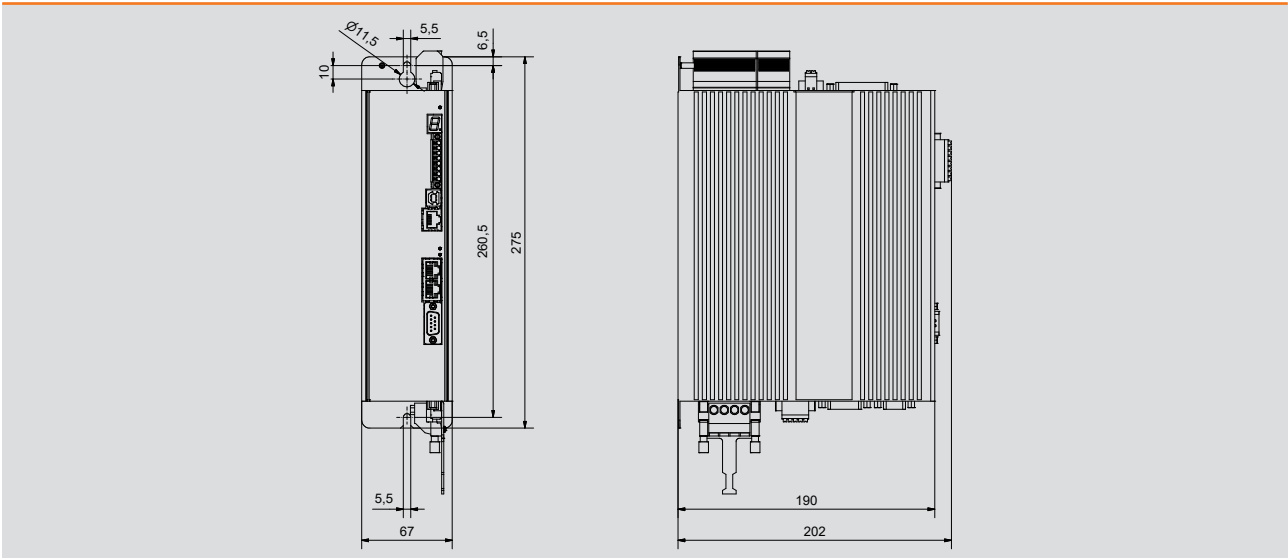
■ HCB

Dimensional drawing

Dimensional Drawing HCB / single phase



Dimensional Drawing HCB / three-phase



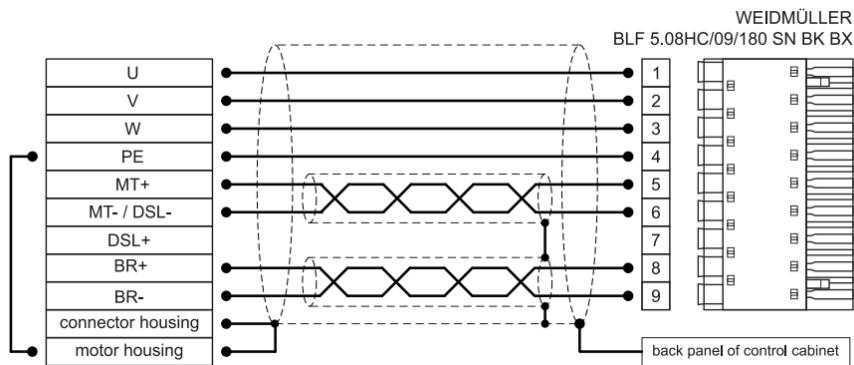
Connectors single-phase HCB

Connector STO [X3]



Pin	Name	Description
1	STOA	Control input A for the STO function
2	GNDA	Reference potential for STO-A
3	STOB	Control input B for the STO function
4	GNDB	Reference potential for STO-B
5	DIN6	Connected to X1, pin 22
6	DIN7	Connected to X1, pin 10
7	DOU0	Connected to X1, pin 12
8	GND	Reference potential for the auxiliary supply voltage

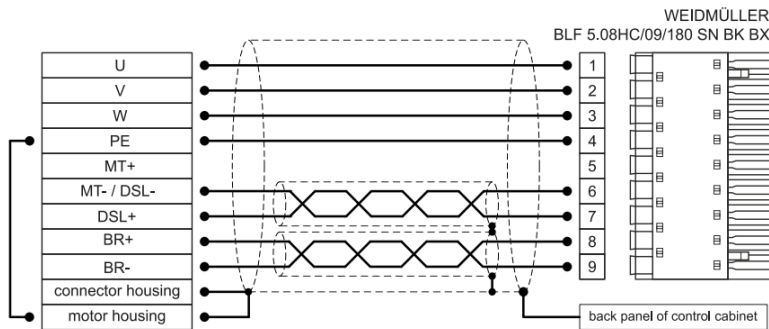
Pin assignment [X6] - motor with a motor temperature sensor



Pin	Name	Specification
1	U	Motor phase U
2	V	Motor phase V
3	W	Motor phase W
4	PE	Protective earth conductor of the motor
5	MT+	Motor temperature sensor +
6	MT-/DSL-	Motor temperature sensor -
7	DSL+	
8	BR+	Holding brake +
9	BR-	Holding brake -

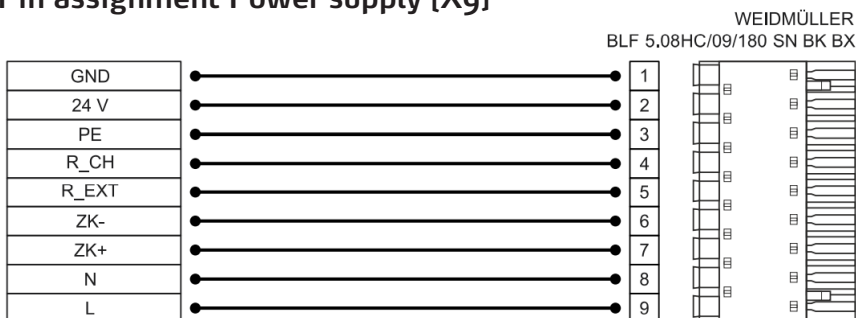
Connectors one-phase HCB

Pin assignment [X6] - motor with HIPERFACE DSL



Pin	Name	Specification
1	U	Motor phase U
2	V	Motor phase V
3	W	Motor phase W
4	PE	Protective earth conductor of the motor
5	MT+	HIPERFACE DSL +
6	MT-/DSL-	HIPERFACE DSL -
7	DSL+	
8	BR+	Holding brake +
9	BR-	Holding brake -

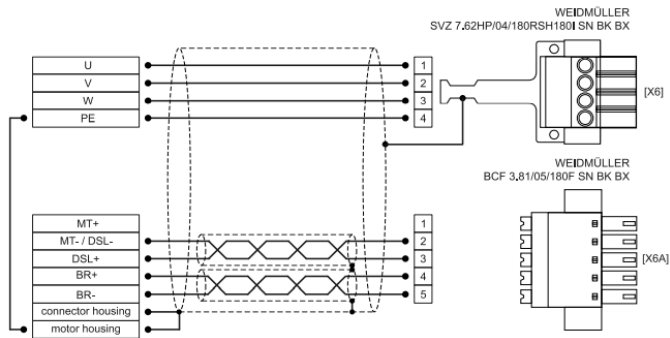
Pin assignment Power supply [X9]



Pin	Name	Specification
1	GND	Supply voltage reference potential
2	24V	Supply voltage for the control module and holding brake
3	PE	Connection of the protective earth (ground) conductor of the mains power supply
4	R_CH	Braking resistor connection
5	R_EXT	Braking resistor connection
6	ZK-	Neg. DC bus voltage
7	ZK+	Pos. DC bus voltage
8	N	Neutral conductor
9	L	Phase conductor/mains phase

Connectors three-phase HCB

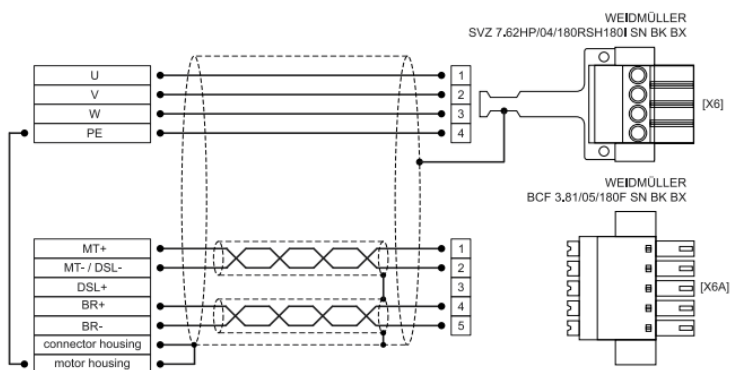
Pin assignment [X6, X6A] - motor with HIPERFACE DSL



Pin X6	Name	Specification
1	U	Motor phase U
2	V	Motor phase V
3	W	Motor phase W
4	PE	Protective earth conductor of the motor

Pin X6A	Name	Specification
1	MT+	
2	MT-/DSL-	HIPERFACE DSL -
3	DSL+	HIPERFACE DSL +
4	BR+	Holding brake +
5	BR-	Holding brake +-

Pin assignment [X6, X6A] - motor with a motor temperature sensor

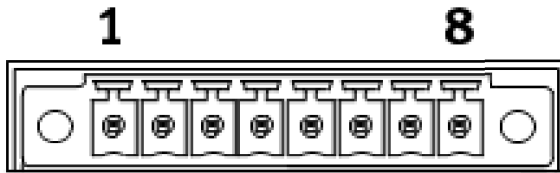


Pin X6	Name	Specification
1	U	Motor phase U
2	V	Motor phase V
3	W	Motor phase W
4	PE	Protective earth conductor of the motor

Pin X6A	Name	Specification
1	MT+	Motor temperature sensor +
2	MT-/DSL-	Motor temperature sensor -
3	DSL+	
4	BR+	Holding brake +
5	BR-	Holding brake +-

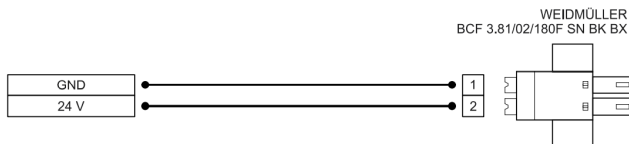
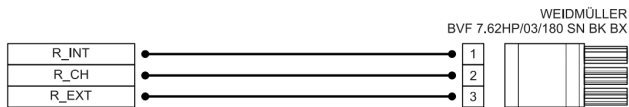
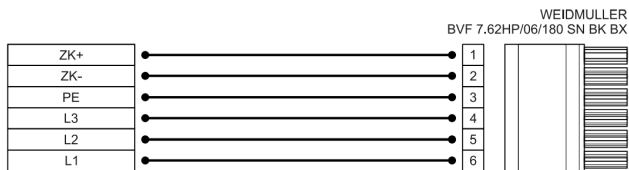
■ Connectors three-phase HCB

Connector STO [X3]



Pin	Name	Description
1	STOA	Control input A for the STO function
2	GNDA	Reference potential for STO-A
3	STOB	Control input B for the STO function
4	GNDB	Reference potential for STO-B
5	DIN6	Connected to X1, pin 22
6	DIN7	Connected to X1, pin 10
7	DOU0	Connected to X1, pin 12
8	GND	Reference potential for the auxiliary supply voltage

Connector power supply [X9], [X9A], [X9B]



Pin X9	Name	Specification
1	ZK+	Pos. DC bus voltage
2	ZK-	Neg. DC bus voltage
3	PE	Connection of the protective earth (ground) conductor of the mains power supply
4	L3	Phase conductor/mains phase 3
5	L2	Phase conductor/mains phase 2
6	L1	Phase conductor/mains phase 1

Pin X9A	Name	Specification
1	R_INT	Internal braking resistor connection
2	R_CH	Braking resistor connection
3	R_EXT	External braking resistor connection

Pin X9B	Name	Specification
1	GND	Supply voltage reference potential
2	24V	Supply voltage for the control module and holding brake

Technical data subject to change! Last changes: 04/2022

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