Accessories

Programming Board

For combination with
Speed Controller:
SC 1801, SC 2402, SC 2804, SC 5004 , SC 5008
Brushless DC-Micromotors
1525...BRC, 3153...BRC,
2232...BX4 SC, 2232...BX4S SC, 2250...BX4 SC,
2250...BX4S SC, 3242...BX4 SC, 3268...BX4 SC

Part No.: 6501.00088

		6501.00088	
Power supply for electronics	U_{elo}	3,5 ... 30	V
Power supply for motor	U_{mot}	0 ... 30	V
Current consumption of electronics	I_{el}	0,1	A
Temperature range:			
– Operating temperature		0 ... + 65	°C
Dimensions and weight:			
– Dimensions (L x B x H)		80 x 65 x 31	mm
– Weight		45	g

General information

Description of connectors / controls:

X1 Terminals for power supplies
Pin 1: GND Ground connection of power supply/supplies
Pin 2: U_{elo} Power supply for electronics
Pin 3: U_{mot} Power supply for motor winding

X2, X3, X6, X10 Terminals for motor / motor controller
Pin 1: U_P Power supply for motor electronics
Pin 2: U_{mot} Power supply for motor winding
Pin 3: GND Power supply negative pole
Pin 4: U_{nsoll} Output for nominal speed setting 0...10V
Pin 5: DIR Output for direction of rotation setting
Pin 6: FG Input for speed signal from motor controller

X5 RS232 connector, may optionally be used instead of X9 in PROG mode for programming

X9 USB connector, may optionally be used instead of X5 in PROG mode for programming

JP1 Jumper can be removed and connected to an amperemeter for motor current measurement at U_{mot}.

JP3 Jumper to separate power supply for electronics and motor
1-2: $U_P = U_{mot}$ » Joint power supply to electronics and motor winding via terminal Umot
2-3: $U_P = U_{elo}$ » Power supply to electronics via separate terminal U_{elo} (separate power supply for electronics and motor winding). Power supply for adapter board also via the terminal selected for U_P

JP9 Connector for external signal for Unsoll, e.g. PWM signal for speed setting. Note: JP10 must then be removed.

JP10 Jumper for selection of the source for U_{nsoll}. Closed: U_{nsoll} adjustable with P1.

S1 Switch for setting the operating mode
PROG mode = software update
MOT mode = motor operation

S2 Switch for setting the direction of rotation of the motor

S3 Switch for switching the power supply U_P for the electronics on/off

P1 P1 is used to set U_{nsoll} from 0...10V. JP10 must be closed. The power supply U_P must be at least 10,5V.

LED 1 Indicates the adapter board is ready for operation

LED 2 Indicates the external controller status.
ON = ready for operation, OFF = error

Start-up

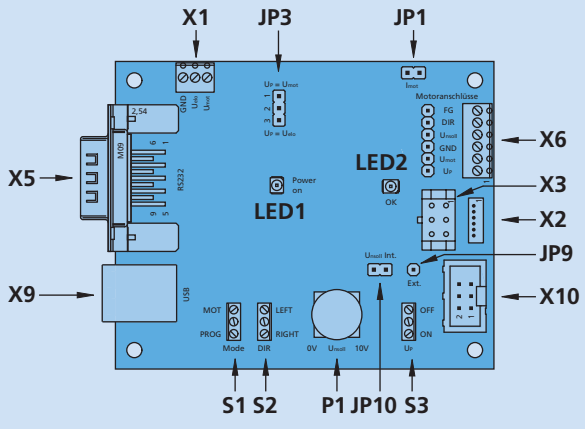
- Connect operating voltage to X1. Use alternatively joint or separate operating voltage for electronics and motor.
  Note: Pay attention to correct setting of JP3.
  Pay attention to minimum/maximum values for U_{mot} and U_{elo}.
- S3 in position OFF; JP1 and JP10 closed.
- Connect motor/motor controller to X2, X3, X6 or X10.
- For PROG mode, connect to a Windows PC at X5 (null modem cable) or X9 (USB connection cable type B).
- LED 1 and LED 2 lights up after power-on for U_{mot} or U_{mot} and U_{elo}.

Driver installation:

If the adapter board is to be operated via the USB connector X9, a special USB driver must be installed if using Windows XP (further details on request).

Dimensional drawing and connection information

scale reduced



6501.00088

Connection

No.	Function
LED 1	Ready for operation
LED 2	Status external controller
Terminals	
X1	Power supply
X2, X3, X6, X10	Connector for motor or SC controller
X5	RS232 connector
X9	USB connector, type B
Jumpers	
JP1	Motor current measurement
JP3	Separation of U_P from U_{mot}
JP9	U_{nsoll} external input signal
JP10	U_{nsoll} int. setting with P1
Switches	
S1	Operating mode
S2	Direction of motor rotation
S3	Power switch on/off
Potentiometer	
P1	U_{nsoll} setting

PROG mode

Settings	
S1	PROG
S2	RIGHT
S3	OFF
P1	0V
JP1	Closed
JP10	Closed

MOT mode

Settings	
S1	MOT
S2	RIGHT or LEFT
S3	OFF - ON
P1	0V ... 10V
JP1	Opt. current measurement
JP10	Select source for U_{nsoll}