

Installing and Wiring the MKP 11A Operator Keypad

The MKP 11A operator keypad is designed to mount through an enclosure door, providing a NEMA 4 protective seal. The keypad is provided with mounting hardware, two mounting tabs, and a sealing gasket.

Use the dimensions shown in Figure 1.1 for the door cut-out. Install the MKP 11A through the gasket and then through the door cutout from the front. Insert the mounting tabs into the holes on each side of the keypad. Place the screws through the mounting tabs and secure the nuts on the screws. Continue to tighten the screws until they push against the enclosure door, drawing the keypad snugly against the sealing gasket.

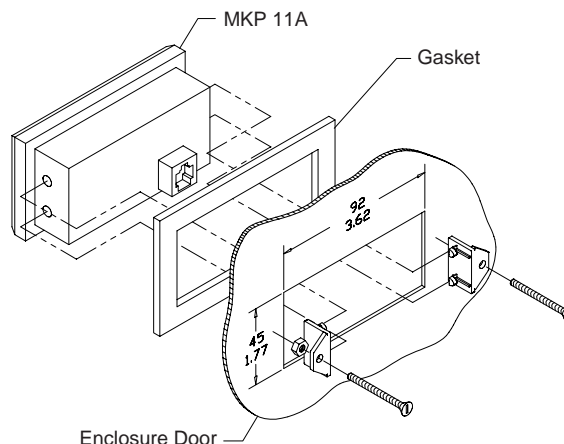


Fig 1.1 MKP 11A Installation

Figure 1.2 shows the wiring required for operation with the MKP 11A operator keypad. The module can operate up to 31 Movimot® units. The standard MLU 11A power supply provides sufficient capacity to power a single MKP 11A keypad. The keypad is provided with a 2-foot cable. One end of the cable is an RJ45 plug for connection to the rear of the keypad. The other end is an RS 485 converter which is wired to the Movimot® as shown. For convenience, use a single conductor of two shielded twisted pairs to connect the MKP 11A cable to the Movimot®. The maximum total cable length is approximately 650 feet (200m) for the entire RS 485 network run.

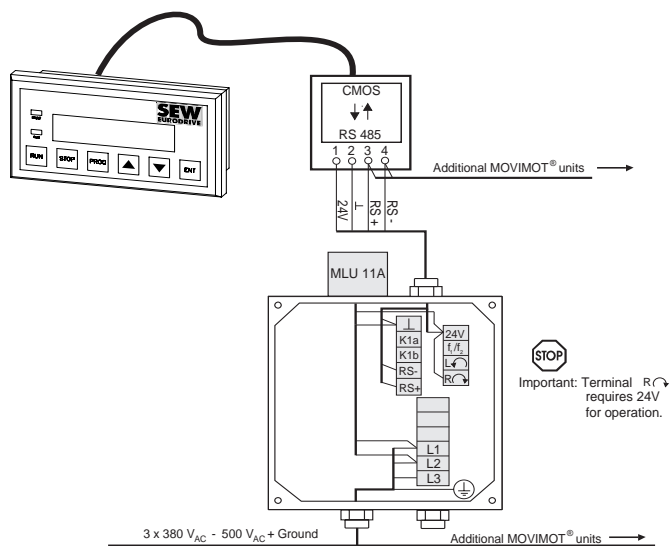
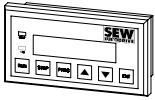


Fig 1.2 MKP 11A Wiring



MKP 11A Control

1. Ensure that the MOVIMOT® is connected correctly (see *Movimot Installation and Operating Instructions*).
2. Set the DIP switch S1/1 ON (= address 0001).
3. Replace the top section and tighten the screws.
4. Adjust **f1** to set the maximum speed desired (see *Movimot Installation and Operating Instructions*).
5. Replace the hole plug over **f1** to protect against ingress of liquids.
6. Switch on the 24 V_{DC} control voltage and the input power supply.
7. Program the keypad parameters as necessary using the instructions in Figure 1.4 and Figure 1.5.

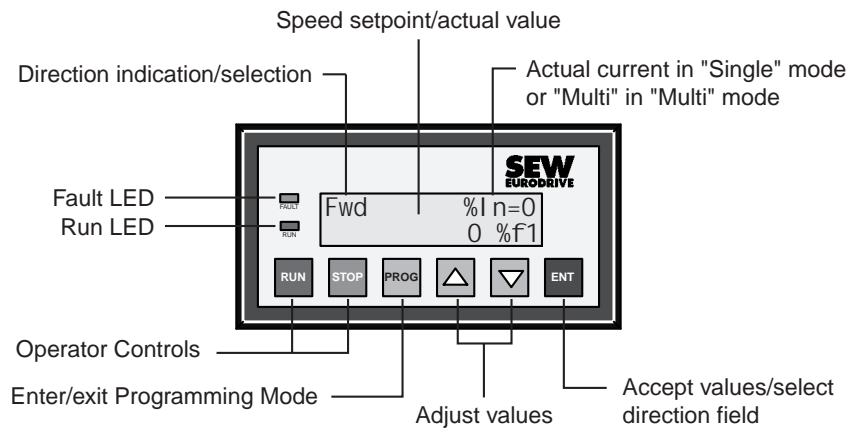


Fig 1.3 MKP 11A layout

To Program:







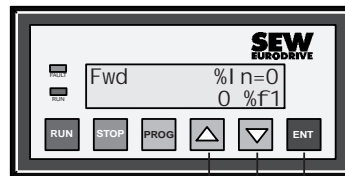
- ① Press Prog to enter programming mode
- ② Scroll to the desired parameter
- ③ Press Enter to select
- ④ Use   to modify value
- ⑤ Press  to accept new value
- ⑥ Press  to exit programming mode

Fig 1.4 Programming the MKP 11A

Parameter	Values	Default	Description
Connect	Single/Multi	Single	Selects between communication with one or multiple drives.
Ramp Time	0.1-10 sec	1 sec	Sets the acceleration/deceleration time.
Reset	Yes/No	No	Resets a faulted drive on the RS 485 network.
Decimal Point	1-4	1	Determines the number of digits to the right of the decimal point in the speed display.
# Digits in Speed	Decimal Point + 1 to 6	5	Total number of digits (including decimal point) in the numerical portion of the speed display.
Scaling Factor	1-65535	1	Number to multiply actual speed into desired display speed.
# Char in units	1-8	4	Number of characters in the displayed speed units.
Units	Characters	"% f1"	Alphanumeric characters displayed to the right of the display speed.
Confirm RUN	Yes/No	No	When "Yes" a RUN command must be confirmed by pressing ENT.
Password	00000-65535	00000	If other than "00000" then user is prompted for the password when PROG is pressed. If password not known, press PROG to return to speed display screen.

8. Operate the drive as shown in Figure 1.5.

To Operate:



- ① While stopped, adjust the speed setpoint value
- ② While Stopped, press Enter to select the direction field
- ④ Use to change the active direction
- ⑤ Press to accept new value
- ⑥ Press to run the Movimot®
- ⑦ Use to change the running speed
- ⑧ While speed indication flashes press to store speed for use on next power up.
- ⑨ Press to stop the Movimot®
- ⑩ Automatic fault status monitoring (Single mode only) →
Press to reset a fault

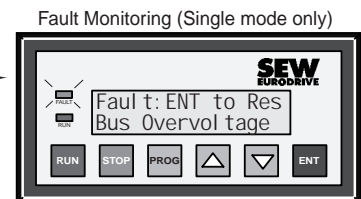


Fig 1.5 MKP 11A Operation

Note: The MKP 11A communicates cyclically with the Movimot®. An interruption of communications lasting 1 second will cause the drive to stop automatically. The drive will resume normal operation upon restoration of communications.

Note: The speed setpoint that is transmitted to the Movimot® is always based on the value of potentiometer **f1**. If you are using absolute units in your display (like bottles/min) adjusting **f1** will cause your display scaling to be invalid. Always adjust **f1** to its maximum required value **before** calibrating your scale factor to the absolute speed of the process.