

PRODUCTION SYSTEM

LP378 KEF-UNIT

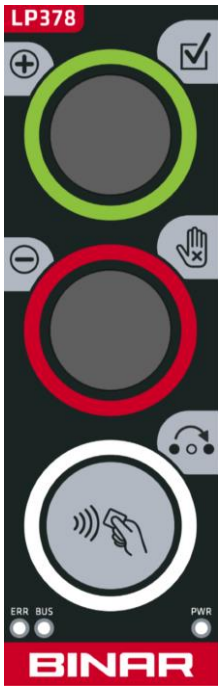
- Clear, Error, and Bypass unit for Binar's quality assurance system
- Quick connectors facilitate easy installation
- Effective tool supports the working method of Lean Production



LP378 KEF-UNIT

The **LP378** tool control unit is integrated into the **LP204 Poka Yoke**, where it connects to tools through I/O (digital input and output) for monitoring. The device's lights alert the operator when the tool is ready for use, when it should be used, and if there's an issue. The buttons on the unit facilitate learning when the tool should be used and how many times.

The KEF unit's goal is to efficiently support zero-defect production, as outlined in Lean Production.



READY

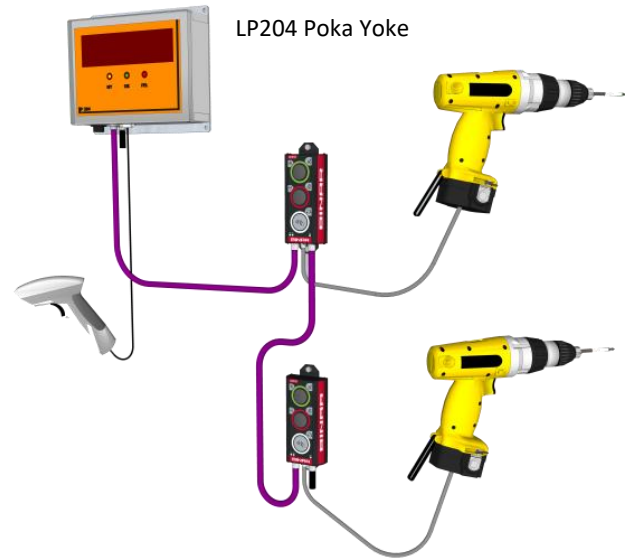
When the green lights are flashing, the tool is in use. When the flashing light becomes solid, it indicates that the use of the tool is complete and approved.

ERROR

A red light indicates an error has occurred and gives a warning, for example, for a timeout when the tool has not been used for a certain amount of time.

BYPASSING

Authorized personnel can bypass tools with the use of a coded **RFID tag** approved by the device's reader.



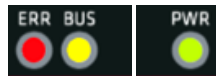
BYPASSES

- The process can be reset to its initial state and restarted.
- Bypassing process steps signals the system that the run is complete and approved.

STATUS INDICATIONS

CAN-BUSS

PWR = Voltage out 24VDC OK
 BUS = CAN-bus com. OK
 ERR = Error on CAN-bus



ADDRESSING

Opt. 1

The device has two knobs to set the CAN-ID from 1 to 61. The setup ensures backward compatibility and replaces the **LP218**.



Opt. 2

By adjusting the address knob to CAN-ID 0, the device obtains the distinctive MAC address represented in a hexadecimal number and barcode format. To utilize the MAC address, it is essential to have both the Gateway **LP301** and the necessary support in the parent system.



RFID.

The **LP376** can be bypassed by using an RFID tag, while its predecessor, the **LP216**, is bypassed with a key switch.

Radio Frequency Identification enables contactless reading of information within a short range. The RFID tag features a pre-programmed number of 421, which requires approval from the parent system for bypassing to occur.

RFID-tag sold separately. Art. 35175

ANSLUTNINGAR

CAN IN

5-pol M12-contact pin



Pin	Signal
1	0V
2	+24V
3	0V
4	CAN High
5	CAN Low

CAN UT

5-pol M12-contact sleeve



Pin	Signal
1	0V
2	+24V
3	0V
4	CAN High
5	CAN Low

I/O

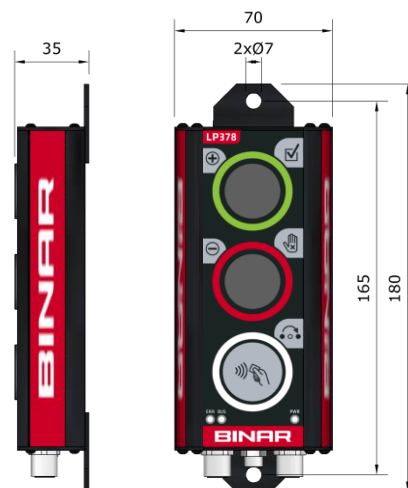
4-pol M8-contact sleeve



Pin	Signal
1	+24V
2	OUT 1/IN 5
3	0V
4	IN 1

TECHNICAL DATA

Article number	51708
Supply voltage	20-32VDC
Own consumption	110mA
Connector CAN	M12 Stift (CAN-in), M12 Sleeve (CAN-ut)
Connector I/O-interface	M8 Sleeve
Data transfer	CAN, 125 kbit/s
CE	EN 61000-6-4 and EN 61000-6-2
Temperature area	0 – 50 °C
Protection	IP51
Weight	400 g
Mounting	Screw montage
Dimensions	b70 x d35 x h180



The superior system connects to the device's M12 connector CAN-in via a gateway and CAN bus. The unit draws power from the same connector.

The Controller Area Network, or CAN, is a bus that facilitates secure and rapid communication among system components.

To connect multiple devices to the system, the device's CAN-out connects the bus to the next device. A terminating resistor, **LP239**, must be connected to the CAN output of the first and last unit in the system to ensure proper functionality of the CAN bus.

SEE ALSO



LP373 art 51705

The SAM unit is equipped with three buttons that are used for Stop, Andon, and Material Shortage alarms in an Andon system.



LP376 art 51708

The KAF unit is utilized in Takt and Poka Yoke systems. It has lamp push buttons for Klar, Andon, and RFID for bypassing quality assurance.

INSTRUCTIONS TO REPLACE LP218

LP218

LP378

CONNECTIONS



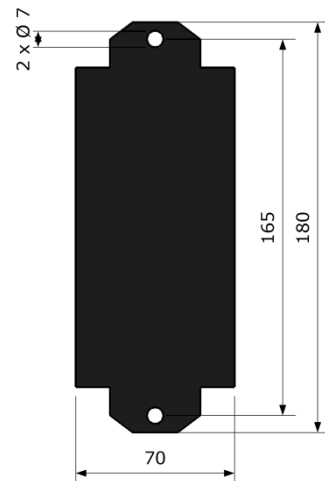
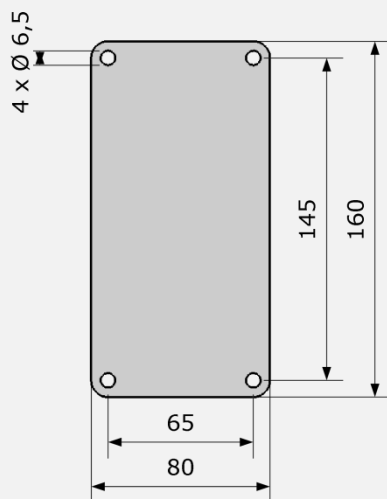
ADDRESSING

The address knob can be accessed by unscrewing the cover of the device.

Address knob is located on the device's rear panel



HOLE PICTURE



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