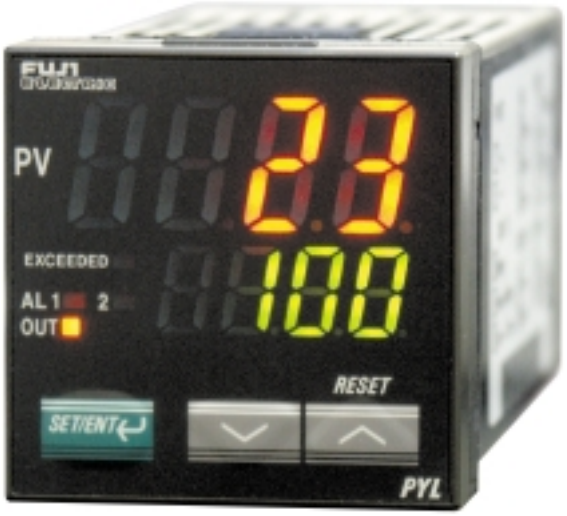
FUJI ELECTRIC PYL LIMIT CONTROLLER

CONFIGURABLE AS EITHER A HIGH OR LOW LIMIT CONTROLLER

Fuji's PYL Limit Controller (1/16 DIN size) is an FM-approved instrument that can be configured either as a high limit or a low limit controller by a user. The PYL features universal input, a timer to count the duration time the setpoint is exceeded, and a register to retain the maximum temperature reached. The two alarm outputs, retransmission output, and communication function are available as optional features.



- **Small, Space-Saving 1/16 DIN Package**
- **Sharp and Large 4-digit LED Display**
- **NEMA 4 Splash-Proof and Dust-Proof Front Panel**
- **Universal Input**
  For Thermocouple, RTD and DC mV & V signals
- **High or Low Limit Control**
- **Retransmission Output (Optional)**
- **Two-Alarm Relay Outputs (Optional)**
- **RS485 Communication Function (Optional)**
  MODBUS, PC-Link & Ladder protocols are supported
- **Digital Input (Optional)**

PYL SPECIFICATIONS

MEASURED VALUE (PV) INPUT

INPUT	1 point
INPUT TYPE	Universal; can be selected by software
SAMPLING PERIOD	500ms

CONTROL OUTPUT

OUTPUT	1 point
OUTPUT TYPE	Relay contact output. Contact capacity: 3A at 240V AC or 3A at 30V DC (with resistance load)

ALARM (OPTION)

ALARM TYPES	22 types (waiting action can be set by software): PV high limit, PV low limit, Deviation high limit, Deviation low limit, Deenergized on deviation high limit, De-energized on deviation low limit, Deviation high and low limits, High and low limits within deviation, De-energized on PV high limit, De-energized on PV low limit, Fault diagnosis output, FAIL output
ALARM OUTPUT	2 relay contacts. Relay contact capacity: 1A at 240V AC or 1A at 30V DC (with resistance load)

RETRANSMISSION OUTPUT OPTION

OPTION	The retransmission output is provided only when the "A" option is specified
OUTPUT SIGNAL	4-20mA DC
MAXIMUM LOAD RESISTANCE	600Ω or less
OUTPUT ACCURACY	±0.3% of span (at 23±2°C ambient temperature)

DIGITAL INPUT (OPTION)

OPTION	The contact inputs are provided only when the "D" option is specified.
FUNCTION	Resetting "exceeded status"
INPUT	2 points (with the shared common terminal)
INPUT TYPE	Non-voltage contact or transistor contact input
CONTACT CAPACITY	At least 12V/10mA

PYL SPECIFICATIONS, CONTINUED

COMMUNICATION FUNCTION OPTION

OPTION	The communication function is provided only when the "R" option is specified
COMMUNICATION PROTOCOL	Ladder communication: Used for communication with PLC. MODBUS communication: Used for communication with equipment featuring the MODBUS protocol
COMMUNICATION INTERFACE	Applicable standards: Complies with EIA RS-485 Number of controllers that can be connected: 31 Maximum communication distance: 1,200m Communication method: Two-wire half-duplex, start-stop synchronization, non-procedural Baud rate: 2400, 4800, or 9600 bps

SAFETY AND EMC STANDARDS

SAFETY	Confirms to IEC1010-1: 1990 & EN61010-1: 1992 Certified for FM-3810 and FM-3545
EMC STANDARDS	Complies with EN61326

POWER SUPPLY AND ISOLATION

POWER SUPPLY	Voltage: Rated at 100-240VAC (±10%) Frequency: 50 or 60Hz
MAXIMUM POWER CONSUMPTION	8VA max. (4W max.)

CONSTRUCTION, MOUNTING, AND WIRING

CONSTRUCTION	Splash-proof IP65 for front panel when not mounted side-by-side. Casing: ABS resin and polycarbonate. Case color: Black
MOUNTING	Flush panel mounting
TERMINALS	Screw terminals

ENVIRONMENTAL CONDITIONS

AMBIENT TEMPERATURE/ HUMIDITY	0-50°C (0-40°C when mounted side-by-side) 20-90% RH (no condensation allowed)

PYL ORDERING INFORMATION

P Y L A – B C D 1

To create a part number fill in the boxes above with the appropriate number and/or letter from the corresponding box below.

Box A: Model

4	= 1/16 DIN Limit Controller	$ 189

Box B: Alarm Output

0	= None	$ 0
F	= 2 Relays	20

Box C: PV Retransmission

0	= None	$ 0
A	= 4-20mA	40

Box D: DI/Communications

0	= None	$ 0
D	= digital Input	20
R	= RS485 Communication	95