



- Two universal inputs
- 0 / 1 / 2 / 3 / 4 setpoints corresponding to input 1, input 2
- Isolated 2 x 0/4~20 mA or 0-10 V DC retransmission outputs corresponding to input 1, input 2
- 24 V DC transmitter supply
- RS485 / MODBUS RTU
- 85~265 V AC SMPS
- ONOFF control

SPECIFICATIONS All specifications at ambient of 25 °C, unless specified otherwise

INPUTS		ENCLOSURE	
No. of inputs	2 (input 1, input 2)	Enclosure	Certified flameproof for gas groups I, IIA & IIB Aluminium alloy 352(H) x 190(W) x 170(D) IP65
Input group 1 (common for both inputs)		Material	Aluminium alloy
Thermocouple	B, E, J, K, N, R, S, T	Dimensions (in mm)	352(H) x 190(W) x 170(D)
RTD	Pt100, 3-wire	Protection	IP65
Voltage	0~50 mV	Keyboard	4 Pushbuttons
Current	0~20 mA, 4~20 mA	Mounting	Wall mount
Input group 2 (common for both inputs)		Mounting accessories	Included
Thermocouple	B, C, D, E, G, J, K, N, R, S, T	Cable entries*	5 x 3/4" ET
RTD	Pt100, 3-wire, Cu53	* Cable glands to be ordered separately	
Current	0~20 mA, 4~20 mA, Square root (for input 1)	PROGRAMMABLE PARAMETERS	
Voltage	0~50 mV	Setpoint	Full range (See Table 1)
Transmitter supply	Through DIP selection following voltage inputs are available : 0~1 V, 0~5 V, 0~10 V, 0~10 mV, 0~100 mV, 0~200 mV	Unit	°C, °F, EU
Range limits	22 V nominal, 30 mA max	Resolution	User selectable 0.01, 0.1 or 1 for linear input, 0.1 or 1 for temperature
Accuracy	See Table 1	High scale	Full range (See Table 1)
Cold junction compensation	Automatic	Low scale	Full range (See Table 1)
Sensor break protection	User programmable	Digital filter	A (minimum) ~ F (maximum)
INDICATION		Hysteresis	0~25% span
Process variable	Upper : 4 digit, 7 segment 0.56" (14.2 mm) red LED display	Bias (for process variable)	-50 to 50% of range limit
Setpoint	Lower : 4 digit, 7 segment 0.56" (14.2 mm) green LED display	Relay logic	a. Heat b. Cool c. Fullscale high alarm d. Full scale low alarm e. Deviation high alarm f. Deviation low alarm g. Inband alarm h. Outband alarm (e. to h. available for SP2, SP3, SP4 only)
Status indication	LEDs for relay status LEDs for setpoint indication LEDs for communication	Alarm types	Self reset or latched and can be disabled at power on
OUTPUTS		Alarm acknowledge	Front panel function used to reset relay in alarm condition
No. of relays	0 / 1 / 2 / 3 / 4	Setpoint lock	ON, OFF
Relay contact type	NO-C-NC	Level lock	ON, OFF
Relay contact rating	5A / 230V AC, resistive	Relay action	Reverse / direct
SSR drive	12 V DC drive signal for external SSR	OTHER	
No. of analog outputs	0 / 1 / 2 (current or voltage)	Supply voltage	a) 85~265 V AC, 50/60 Hz b) 20~35 V DC (optional)
Current output	4~20 mA / 0~20 mA / 20~4 mA / 20~0 mA isolated from input	Power consumption	4 watts maximum
Maximum load for current output	500 ohms	Operating ambient temperature	0~50 °C
Voltage output	0~10 V / user specified	Relative humidity	Below 90%, non condensing
Load for voltage output	>10 Kohms		
COMMUNICATION			
Port	RS485		
Protocol	Modbus RTU		
Slave ID	User programmable (1~256)		

TABLE 1

SENSOR / INPUT	RANGE LIMITS (°C / EU)		RANGE IN WHICH ACCURACY IS SPECIFIED		TYPICAL ACCURACY AT 30 °C (°C / EU)	WORST CASE ACCURACY (°C / EU)
	LOW SCALE	HIGH SCALE	LOW SCALE	HIGH SCALE		
Input Group 1						
Pt - 6% Rh / Pt - 30% Rh (B)	400	1820	400	1820	± 3	± 5
Chromel / Constantan (E)	-270	850	0	850	± 1	± 3
Iron / Constantan (J)	-210	760	0	760	± 1	± 3
Chromel / Alumel (K)	-270	1372	-50	1200	± 1	± 3
Nicrosil / Nisil (N)	-270	1300	-50	1200	± 1	± 3
Pt / Pt - 13% Rh (R)	0	1760	400	1760	± 2	± 5
Pt / Pt - 10% Rh (S)	0	1760	400	1760	± 2	± 5
Copper / Constantan (T)	-270	400	-200	400	± 1	± 3
Pt100, 3-wire	-200	850	-200	600	± 0.3	± 1.0
Linear (0~50 mV, 0~20 mA, 4~20 mA)	-1999	9999	-1999	9999	± 5 EU	± 20 EU
Input Group 2						
The following inputs are available in Input Group 2 in addition to inputs of Input Group 1.						
Tungsten - 5% Rh / Tungsten - 26% Rh (C)	0	2320	0	2320	± 3	± 5
Tungsten - 3% Rh / Tungsten - 25% Rh (D)	0	2310	0	2310	± 3	± 5
Tungsten / Tungsten - 26% Rh (G)	0	2310	0	2310	± 3	± 5
Cu53	0	180	0	180	± 0.3	± 0.5
Linear (0~10 mV, 0~100 mV, 0~200 mV, 0~1 V, 0~5 V, 0~10 V)	-1999	9999	-1999	9999	± 5 EU	± 20 EU
Linear (4~20 mA) with square root	0	9999	0	9999	± 10 EU	± 40 EU

ORDERING INFORMATION

FLP X96A will be supplied with the following standard specifications :

1.	Input	Input group 1
2.	Supply voltage	85~265 VAC
3.	RS485	Not provided

ORDER CODE	
2194	A

A	Configuration		
	No. of inputs	Relay	4~20 mA output
01	1	2	0
02	1	2	1
03	1	4	0
04	1	2	2
05	1	4	2
06	2	0	0
07	2	2	0
08	2	4	0

Ordering Options

The following ordering options are available on request. Minimum order quantity and/or minimum order value may apply.

	Option	Details
1.	Analog output	0~10 V DC
2.	Supply voltage	24 V DC
3.	Input	Input group 2
4.	Communication	RS485