

INPUT/OUTPUT CONFIGURATION PARAMETERS : PAGE 12			
Parameters	Settings (Default Value)		
Control Action CAct	OnOff On-Off PULS Pulse PId PID (Default : PID)		
Control Logic CtrL	rEu Reverse dir Direct (Default : Reverse)		
Setpoint Low Limit SPLo	Min. Range to Setpoint High for the selected Input Type (Default : -199)		
Setpoint High Limit SPHi	Setpoint Low to Max. Range for the selected Input Type (Default : 1376)		
Sensor Break Output Power % SbOP	0 to 100 (Default : 0)		
Input Type InPt	Refer Table 1 (Default : Type K)		
PV Units Unit	°C °C °F °F (Default : °C)		
Signal Low SGLo	Input Type	Settings	Default
	0 to 20 mA	0.00 to Signal High	0.00
	4 to 20 mA	4.00 to Signal High	4.00
	Reserved	0.0 to Signal High	0.0
	0 to 80 mV	0.00 to Signal High	0.00
	0 to 1.25 V	0.000 to Signal High	0.000
	0 to 5 V	0.000 to Signal High	0.000
	0 to 10 V	0.00 to Signal High	0.00
	1 to 5 V	1.000 to Signal High	1.000
Signal High SGHi	Input Type	Settings	Default
	0 to 20 mA	Signal Low to 20.00	20.00
	4 to 20 mA	Signal Low to 20.00	20.00
	Reserved	Signal Low to 80.00	80.00
	0 to 80 mV	Signal Low to 80.00	80.00
	0 to 1.25 V	Signal Low to 1.250	1.250
	0 to 5 V	Signal Low to 5.000	5.000
	0 to 10 V	Signal Low to 10.00	10.00
	1 to 5 V	Signal Low to 5.000	5.000
PV Resolution rSLn	Refer Table 1 (Default : 1)		
PV Range Low r.Lo	-1999 to 9999 (Default : 0)		
PV Range High r.Hi	-1999 to 9999 (Default : 1000)		
Offset for PV OFSt	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 0)		
Digital Filter Time Constant FiLt	0.5 to 60.0 Seconds (in steps of 0.5 Seconds) (Default : 2.0 Sec.)		

CONTROL PARAMETERS : PAGE 10	
Parameters	Settings (Default Value)
Proportional Band Pb	1 to 9999 counts (Default : 500)
Integral Time It	0 to 3600 Seconds (Default : 100 Sec.)
Derivative Time dT	0 to 600 Seconds (Default : 16 Sec.)
Cycle Time Ct	0.5 to 100.0 Seconds (in steps of 0.5 secs.) (Default : 10.0 Sec.)

Parameters	Settings (Default Value)
Relative Cool Gain rELC	0.1 to 10.0 (Default : 1.0)
Cool Cycle Time CCT	0.5 to 100.0 Seconds (in steps of 0.5 secs.) (Default : 10.0 sec.)
Hysteresis HYSL	1 to 9999 counts (Default : 2)
Pulse Time PLt	Pulse ON Time to 120.0 Seconds (Default : 2.0 sec.)
Pulse On Time OnT	0.1 to Value set for Pulse Time (Default : 1.0)
Cool Hysteresis CHYS	1 to 9999 counts (Default : 2)
Cool Pulse Time CPLt	Cool ON Time to 120.0 Seconds (Default : 2.0)
Cool Pulse ON Time COnT	0.1 to Value set for Cool Pulse Time (Default : 1.0)
Heat Power Low PL	0 to Heat Power High (Default : 0)
Heat Power High PH	Heat Power Low to 100 (Default : 100)
Cool Power Low CPL	0 to Cool Power High (Default : 0)
Cool Power High CPH	Cool Power Low to 100 (Default : 100)

SUPERVISORY PARAMETERS : PAGE 13	
Parameters	Settings (Default Value)
Self-Tune Command tUnE	no No YES Yes (Default : No)
Overshoot Inhibit OS.ih	dSbL Disable EnbL Enable (Default : Disable)
Overshoot Inhibit Factor O.hF	1.0 to 2.0 (Default : 1.0)
SP Adjustment on Lower Readout SPLr	dSbL Disable EnbL Enable (Default : Enable)
SP Adjustment on Operator Page SPOP	dSbL Disable EnbL Enable (Default : Enable)
Manual Mode HRnd	dSbL Disable EnbL Enable (Default : Disable)
Alarm SP Adjustment on Operator Page ALSP	dSbL Disable EnbL Enable (Default : Disable)
Standby Mode StbY	dSbL Disable EnbL Enable (Default : Disable)
Profile Abort Command on Page-1 Abrt	dSbL Disable EnbL Enable (Default : Disable)

Parameters	Settings (Default Value)
Controller ID Number Id	1 to 127 (Default : 1)
Baud Rate bAUD	48 4800 96 9600 192 19200 (Default : 9.6)
Communication Parity PARr	nonE None EuEn Even Odd Odd (Default : Even)
Communication Write Enable ConE	no No YES Yes (Default : Yes)

OP1, OP2 & OP3 FUNCTION PARAMETERS : PAGE 15	
Parameters	Settings (Default Value)
Output-1 Type OP1t	rLY Relay SSr SSR 0-20 0 - 20mA 4-20 4 - 20mA 0-5 0 - 5 V 0-10 0 - 10 V (Default : Relay)
Output-2 Function Selection OP2F	nonE None AL_1 Alarm EOP End of Profile CCon Cool Control (Default : None)
Alarm-1 Logic ALLG	norm Normal rEu Reverse (Default : Normal)
Output-2 Type OP2t	rLY Relay SSr SSR 0-20 0 - 20mA 4-20 4 - 20mA 0-5 0 - 5 V 0-10 0 - 10 V (Default : Relay)
OP2 Event Status OP2ES	On ON OFF OFF (Default : ON)
OP2 Event Time Units OP2UE	SEC Seconds min Minutes Hour Hours (Default : Seconds)
OP2 Event Time OP2ET	0 to 9999 (Default : 0)

Parameters	Settings (Default Value)
Output-3 Function Selection OP3F	nonE None AL_2 Alarm-2 EOP End of Profile rEC Recorder (Default : Alarm)
Alarm-2 Logic A2LG	norm Normal rEu Reverse (Default : Normal)
OP3 Event Status OP3ES	On ON OFF OFF (Default : ON)
OP3 Event Time Units OP3UE	SEC Seconds min Minutes Hour Hours (Default : Seconds)
OP3 Event Time OP3ET	0 to 9999 (Default : 0)
Recorder Output Type rECO	0-20 0 to 20mA 4-20 4 to 20mA 0-5 0 to 5 Volts 0-10 0 to 10 Volts (Default : 0 to 20mA)

ALARM AND RETRANSMISSION (RECORDER) PARAMETERS : PAGE 11	
Parameters	Settings (Default Value)
Alarm-1 Type AL_1	nonE None P.Lo Process Low P.Hi Process High dE Deviation Band bAnd Window Band (Default : None)
Alarm-1 Setpoint ALSP	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-1 Deviation Band ALdE	For DC mA/mV/V : -1999 to 9999 counts For Thermocouples/RTD : -999 to 999 or -1.999 to 999.9 (Default : 5)
Alarm-1 Window Band ALbA	For DC mA/mV/V : 3 to 9999 counts For Thermocouples/RTD : 3 to 999 or 0.3 to 999.9 (Default : 5)
Alarm-1 Hysteresis ALHY	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 2)
Alarm-1 Inhibit ALih	no No YES Yes (Default : No)
Alarm-2 Type AL_2	nonE None P.Lo Process Low P.Hi Process High dE Deviation Band bAnd Window Band (Default : None)

Parameters	Settings (Default Value)
Alarm-2 Setpoint A2SP	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-2 Deviation Band A2dE	For DC mA/mV/V : -1999 to 9999 counts For Thermocouples/RTD : -999 to 999 or -1.999 to 999.9 (Default : 5)
Alarm-2 Window Band A2bA	For DC mA/mV/V : 3 to 9999 counts For Thermocouples/RTD : 3 to 999 or 0.3 to 999.9 (Default : 5)
Alarm-2 Hysteresis A2HY	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 2)
Alarm-2 Inhibit A2ih	no No YES Yes (Default : No)
PV/SP Selection For Retransmission trnS	PV Process Value SP Setpoint (Default : Process Value)
Recorder (Retransmission) Low rECL	Min. to Max. Range Specified for the Selected Input Type (Default : -199)
Recorder (Retransmission) High rECH	Min. to Max. Range Specified for the Selected Input Type (Default : 1376)

PROFILE CONFIGURATION PARAMETERS : PAGE 16	
Parameters	Settings (Default Value)
Profile mode Enable PrOF	dSbL Disable EnbL Enable (Default : Disable)
Number of Segments nSEQ	1 to 16 (Default : 16)
Number of Repeats nrPt	1 to 9999 (Default : 1)
Common Holdback CoHb	no No YES Yes (Default : Yes)
Output Off OPOF	no No YES Yes (Default : No)
Power Fail Strategy PrFL	Abrt Abort Cont Continue (Default : Continue)

PROFILE SETTING PARAMETERS : PAGE 14	
Parameters	Settings (Default Value)
Segment Number SEQn	1 to 16 (Default : 1)
Target Setpoint t.SP	Min. to Max. Range specified for the selected Input Type (Default : -199)
Time Interval t.inE	0 to 9999 Minutes (Default : 0)
Holdback Type Hbty	nonE None UP Up dn Down both Both (Default : None)
Holdback Value HbUL	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 1)

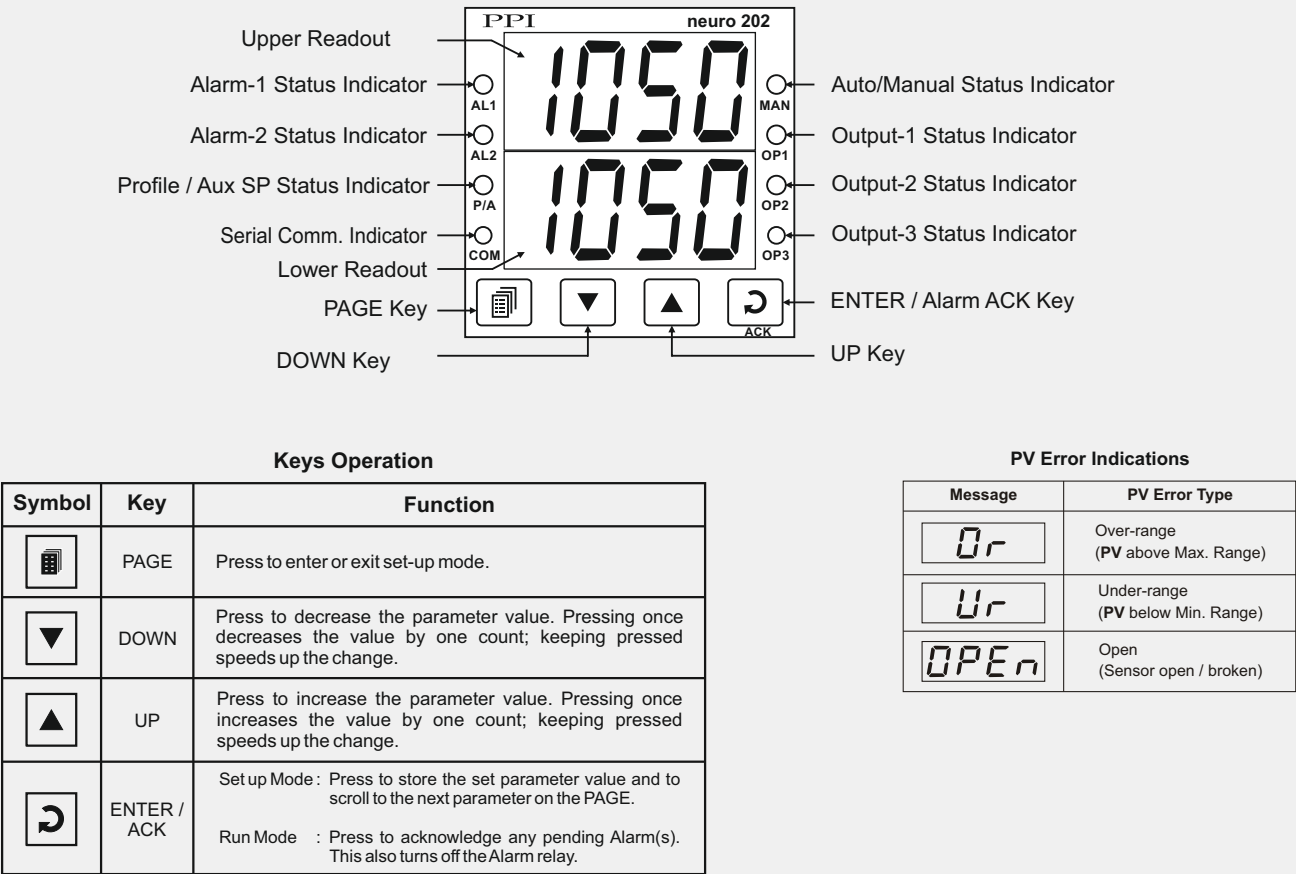
ON-LINE ALTERATIONS : PAGE 1	
Parameters	Settings (Default Value)
End of Profile Acknowledge EOPR	no No YES Yes (Default : No)
Profile Start Command Strt	no No YES Yes (Default : No)
Profile Abort Command Abrt	
Profile Pause Command PAUS	no No YES Yes (Default : No)
Segment Skip Command SP.P	no No YES Yes (Default : No)
Segment Time Interval t.inE	0 to 9999 Minutes
Segment Holdback Type Hbty	nonE None UP Up dn Down both Both
Segment Band Value HbUL	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9
Profile Repeat Counter brPt	1 to 9999

OPERATOR PAGE PARAMETERS : PAGE 0	
Parameters	Settings (Default Value)
(De)Activate Standby Mode StbY	no No YES Yes (Default : No)
Control Setpoint SP	Setpoint Low Limit to Setpoint High Limit (Default : -1999)
Alarm-1 Setpoint ALSP	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-1 Deviation Band ALdE	For DC mA/mV/V: -1999 to 9999 counts For Thermocouples/RTD: -999 to 999 or -1.999 to 999.9 (Default : 0)
Alarm-1 Window Band ALbA	For DC mA/mV/V: 3 to 9999 counts For Thermocouples/RTD: 3 to 999 or 0.3 to 999.9 (Default : 0)
Alarm-2 Setpoint A2SP	Same as that for Alarm-1 above but applied to Alarm-2.
Alarm-2 Deviation Band A2dE	
Alarm-2 Window Band A2bA	
Auxiliary Control Setpoint AUSP	Setpoint Low Limit to Setpoint High Limit (Default : -1999)

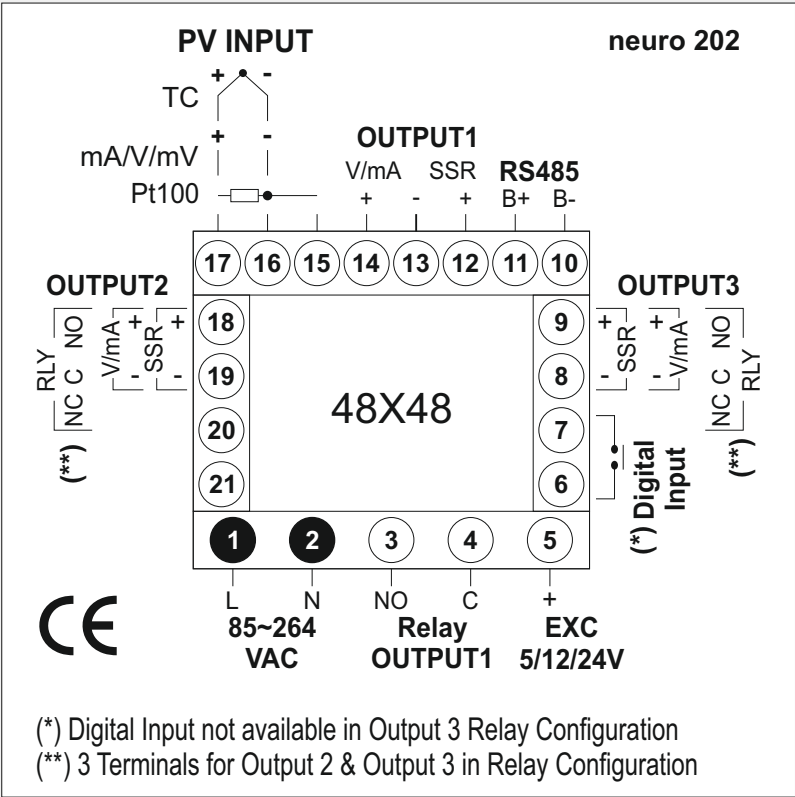
Table 2

Option	What it means	Range (Min. to Max.)	Resolution
	Type J Thermocouple	0 to +960°C / +32 to +1760°F	Fixed 1°C / 1°F
	Type K Thermocouple	-200 to +1376°C / -328 to +2508°F	
	Type T Thermocouple	-200 to +385°C / -328 to +725°F	
	Type R Thermocouple	0 to +1770°C / +32 to +3218°F	
	Type S Thermocouple	0 to +1765°C / +32 to +3209°F	
	Type B Thermocouple	0 to +1825°C / +32 to +3092°F	
	Type N Thermocouple	0 to +1300°C / +32 to +2372°F	
	Reserved for customer specific Thermocouple type not listed above. The type shall be specified in accordance with the ordered (optional on request) Thermocouple type.		
	3-wire, RTD Pt100	-199 to +600°C / -328 to +1112°F or -199.9 to 600.0°C / -199.9 to 999.9°F	User settable 1°C / 1°F or 0.1°C / 0.1°F
	0 to 20mA DC current	-1999 to +9999 units	User settable 1 / 0.1 / 0.01/ 0.001 units
	4 to 20mA DC current		
	Reserved		
	0 to 80mV DC voltage		
	0 to 1.25V DC voltage		
	0 to 5.0V DC voltage		
	0 to 10.0V DC voltage		
	1 to 5.0V DC voltage		

FRONT PANEL LAYOUT



ELECTRICAL CONNECTIONS



(*) Digital Input not available in Output 3 Relay Configuration

(**) 3 Terminals for Output 2 & Output 3 in Relay Configuration