Setup Page

Order in Setup Menu	Series 965 Parameter	Series 965 Parameter Name	Default	Range	User Value	Order in Setup Menu	PM Express Control Parameter	PM Express Control Parameter Name	Default	Range	User Value	Notes or differences in PM Express Control to Series 965
1	LOC	Lock	0	0		1	LOC	Lock	5	5		
				1						4		The order to specify security is reversed from Series 965 to PM. Settings of 5 = 0, 4 = 1, …
				2						3		
				3						2		
				4						1		
												Choose sensor type, then linerization. No DIP switch required in PM. Series 965 used DIP switches rather than parameter.
	Series 965 uses DIP switch to select sensor type.					2	SEn	Sensor Type	tc	tc		
										volt		Supports 0 to 10 VDC analog input only.
										mA		Supports 4 to 20 mA analog input only.
										ro.1H		Setting of ro.1H is same as rtd (100 ohm Platinum, DIN curve)
2	In	Input	J	J		3	L in	Linearization	J	J		
				H						H		H is choice for Type K t/c
				t						t		
				n						n		
				S						S		
				rtd						b		
				rtd						c		
										d		Thermocouple types b, c, d, E and F were not available in Series 965.
										E		
										F		
3	dEC	Decimal	0	0		4	dEC	Decimal	0	0		
				0.0						0.0		Use decimal setting to get tenths for RTD. Series 965 could only display in whole units for thermocouples.
				0.00						0.00		
4	C-F	Celsius - Fahrenheit	F	F		5	C-F	Celsius - Fahrenheit	F	F		
				C						C		
5	rL	Range Low	varies	varies		6	rL	Range Low	0	-1999 to 9999		
6	rh	Range High	varies	varies		7	rh	Range High	9999	-1999 to 9999		
7	Ot1	Output 1	ht	ht		8	Fn1	Function of Output 1	HEAt	HEAt		
				CL						Cool		
										oFF		Series 965 cannot disable output 1.
										ALM		Series 965 cannot program output 1 as alarm.
8	HSC	Hysteresis-Control	2	varies			See parameter 11 below.					See parameter Hysteresis (Heat & Cool) later in PM Setup Menu.
						9	oty	Output Type	volt	volt		Series 965 used DIP switch to select.
										mA		
9	Ot2	Output 2	Con	Con		10	Fn2	Function of Output 2	oFF	oFF		
												Select Alarm type (Process or Deviation) and Alarm Display later in Setup Page to match requirement.
				PrA						ALM		
				Pr						HEAt		Con on Series 965 means opposite of output 1. If output 1 was heat, then cool. If output 1 was cool, then heat.
				dEA						Cool		
				dE								
				no								
	Series 965 used a setting of 0 for proportional band 1 to affect algorithm.					11	hAG	Heat Algorithm	P id	P id		
										on.oF		Setting of the Pb1 to 0 in Operations Menu on Series 965 is same as on/off on PM.
										oFF		Series 965 does not provide method to disable heat agorithm.
						12	h.SC	Hysteresis (Heat & Cool)	3	0 to 9999		See HSC in Series 965 Setup Menu

Setup Page

Order in Setup Menu	Series 965 Parameter	Series 965 Parameter Name	Default	Range	User Value	Order in Setup Menu	PM Express Control Parameter	PM Express Control Parameter Name	Default	Range	User Value	Notes or differences in PM Express Control to Series 965
						13	CAG	Cool Algorithm	oFF	oFF Pid onoF		Series 965 does not provide method to disable cool agorithm. Setting of the Pb1 to 0 in Operations Menu on Series 965 is same as on/off on PM.
	Series 965 sets alarm type by output function.					14	ALY	Alarm Type PM sets alarm type independently of output function.	oFF	oFF PrAL dEAL		
10	HSA	Hysteresis-Alarm	2	varies		15	AhY	Alarm Hysteresis	1	0 to 9999		
	Series 965 used open on alarm.					16	ALG	Alarm Logic	ALC	ALC ALo		Series 965 did not provide alarm logic settings. Set A.Lo to be the same.
11	LAt	Latching	nLA	nLA LAt		17	ALA	Alarm Latching	nLAt	nLAt LAt		
	Series 965 combined this function with alarm silencing.					18	AbL	Alarm Blocking	oFF	oFF Str SEPt both		Series 965 combined alarm blocking and alarm silencing. Set to both if Alarm Silencing is On.
12	SIL	Silencing	OFF	OFF On		19	SiL	Alarm Silencing	oFF	oFF on		Series 965 combined alarm blocking and alarm silencing.
13	rtd	RTD	din	din JiS								PM does not offer JIS support for RTD sensors so this parameter is not available.
	Series 965 does not provide alarm display.					20	AdSP	Alarm Display	on	on oFF		Series 965 did not offer Alarm Display. Set to ON to match the behavior of the Series 965.
14	rP	Ramping	OFF	OFF Str On		21	rP	Ramp Action	oFF	oFF Str SEPt both		PM uses the choice Both where the Series 965 used the choice On.
15	rt	Rate in degrees / hr	100	0 to 9999		22	rrt	Ramp Rate	1.0	0 to 9999		
16	P L	Power Limiting	100	0 to 100		23	SLo	Scale Low Output 1	0.0	-100.0 to 100.0		Sets low range of electrical units. Ex. 4.00 mA or 0.0V. See Output Type above.
Series 965 used power limit to restict PID power to physical output. PM uses electrical Scale for process or Power scale for time proportioning output types.						24	Sh1	Scale High Output 1	10.0	-100.0 to 100.0		Sets high range of electrical units. Ex. 20.00 mA or 5.0V. See Output Type above.
						25	oh1	Power Scale High Output 1	0.0	0.0 to 100.0		Set power in percent for time proportioning output types (switched dc or relays)
						26	oh2	Power Scale High Output 2	100.0	0.0 to 100.0		
17	dSP	Display	nor	nor SEt Pro		27	PAr1	Upper or Left Display	AC.Pu	AC.Pu nonE		Set what is to be displayed in upper and lower displays. Series 965 when set to nor, matches PM default.
						28	PAr2	Lower or Right Display	AC.SP	AC.SP Ah1 ALo nonE		
						29	Ad.S	Zone Address - Std Bus				Series 965 did not support serial communications and therefore has no address to set.

Operations Page

Order in Oper Menu	Series 965 Parameter	Series 965 Parameter Name	Default	Range	User Value	Order in Oper Menu	PM Express Control Parameter	PM Express Control Parameter Name	Default	Range	User Value	Notes or differences in PM Express Control to Series 965
						1	AUt	Autotune	no	no YES		PM allows autotune to be requested. No option for tuning aggressiveness.
Series 965 showed % indicator for manual mode. No parameter to view active control mode.						2	C.Pn	Control Mode Active	AUto	oFF AUto MAn		
1	Pb 1	Proportional Band 1	varies	varies		3	h.Pb	Heat Proportional Band	varies	varies		Enter PM proportional band value based on function of Series 965 output selected.
Series 965 sets proportional band based on output, not algorithm.						4	C.Pb	Cool Proportional Band	varies	varies		
2	rE 1	Reset 1	0.00	0.00 to 9.99		5	t i	Time Integral	180	0 to 9999		If Series 965 uses reset, take reciprocal of setting and multiply by 60. Enter in Ti.
3	It 1	Integral 1	0.00	0.00 to 9.99			PM only uses Integral in seconds per repeat.					If Series 965 uses integral, take setting and multiply by 60. Enter in Ti.
4	rA 1	Rate 1	0.00	0.00 to 9.99		6	td	Time Derivative	0	0 to 9999		Multiply by 60 and enter in Td.
5	dE 1	Derivative 1	0.00	0.00 to 9.99			PM uses Derivative in seconds.					
6	Ct 1	Cycle Time 1	5.0	0.1 to 999.9		7	ot.b 1	Time Base Output 1	varies	varies		Set time base for Output 1 - was Ct1 in Series 965
						8	ot.b2	Time Base Output 2	varies	varies		Set time base for Output 2 - was Ct2 in Series 965
7	AL0	Alarm Low	-999	varies		9	A.Lo	Alarm Low Set Point	32	varies		
8	AH 1	Alarm High	999	varies		10	A.H i	Alarm High Set Point	300	varies		
9	Pb2	Proportional Band 2	varies	varies			See Heat and Cool Proportional Band in parameters 3 & 4 above.					
10	rE2	Reset 2	0.00	0.00 to 9.99			See Ti in parameter 5 above. Only one integral setting in PM product.					If Series 965 uses reset, take reciprocal of setting and multiply by 60. Enter in Ti.
11	It2	Integral 2	0.00	0.00 to 9.99								If Series 965 uses integral, take setting and multiply by 60. Enter in Ti.
12	rA2	Rate 2	0.00	0.00 to 9.99			See Td in parameter 6 above. Only one derivative setting in PM product.					Multiply by 60 and enter in Td.
13	dE2	Derivative 2	0.00	0.00 to 9.99								
14	Ct2	Cycle Time 2	5.0	varies			See ot.b2 in parameter 8 above.					
15	CAL	Calibration Offset	0	+/-180		11	i.CA	Calibration Offset	0	varies		
16	AUt	Autotune	0	0, 1, 2, 3			See Autotune in parameter 1 above.					