

S100 suggested basic PID settings (FANS, PUMPS, etc) - no sleep mode set

Parameter	Description	Unit	Default set	Suggested set	Notes
Acc	Accelerating time	seconds	*20.0	5 to 60	Increase if overcurrent 'OC' trip occurs on accelerating. If PID control, set = 0.1
Dec	Decelerating time	seconds	**30.0	As required	Increase if overvoltage 'Ov' trip occurs on stopping or decelerating. If PID control, set = 0.1
Drv	Command source	-	1	1	Connect 'RUN FORWARD' contact between terminals 'P1' and 'CM' or '24'. Close to RUN, open to STOP.
Frq	Frequency Ref source	-	0	2 or 3	Set 2 if using 0-10V input on terminal 'V1'. Set 5 if using mA signal on terminal 'I2'

No more essential parameters in this group

dr.09	Control Mode	-	0	0	0 = V/F control for light duty applications
dr.14	Motor power	KW	*	!	Factory set 1:1 to inverter size. Change if lower or higher power motor is connected especially when using dual rating.
dr.18	Base Frequency	Hz	60.00	50.00	Set to frequency shown on motor rating plate (normally 50Hz in UK/Europe)
dr.20	Max. Output Frequency	Hz	60.00	50.00	Sets maximum allowable frequency (motor speed) - reduce to 50.00 for UK/European motors.
dr.93	Parameter Initialize	-	-	N/A	Set to 0 to set ALL groups back to factory set values

No more essential parameters in this group

ba.10	Input Power Frequency	Hz	60.00	50.00	Set to 50Hz if using in UK/Europe etc
ba.11	Pole number	-	4	As required	Check motor rating plate rpm data. ie, 1500 (-1 to -10%) = 4, 1000 (-1 to -10%) = 6, 3000 (-1 to -10%) = 2, etc
ba.13	Motor rated current	A	-	As required	Set to motor rating plate current. (Be careful to use the correct value if star/delta or 50/60Hz values are given)
ba.15	Motor rated voltage	V	-	As required	Set to motor rating plate value
ba.19	AC Input voltage	V	380	400	Set to 400V or whatever the input line to line voltage is.

Ad.24	Frequency limits select	-	0	1	Set to 1 to allow changes to upper and lower frequency (speed) limits
Ad.25	Low limit	Hz	0.50	0.50 (or higher)	
Ad.26	High Limit	Hz	60.00	50.00 (or lower)	
Ad.64	Cooling Fan operation	-	0	2	0 = Fan operates when inverter output is ON; 2 = Fan operates on internal thermostat (only runs when needed)

No more essential parameters in this group

Ap.01	Application function select	-	0	2	Set to 2 for process PID control
Ap.20	PID ref (setpoint) source	-	0	As required	Set to 0 for keypad, 1 for terminal V1 (0-10V), 4 for terminal I2 (4-20mA)
Ap.21	PID feedback source	-	0	As required	Set to 0 for terminal V1 (0-10V), 3 for terminal I2 (4-20mA)
Ap.22	Proportional (P) gain	%	50.0	As required	If set too low setpoint may not be reached. If set too high instability (hunting) may occur
Ap.23	Integral (I) time	seconds	10.0	As required	If set too low setpoint may not be reached. If set too high instability (hunting) may occur
Ap.24	Differential (D) time	seconds	0	As required	May not be required unless a sudden large change in flow or pressure is likely
Ap.28	PID operation mode	-	0	1	Set to 1 for normal PID operation.
Ap.31	PID output inverse	-	0	As required	Set as required for application

Important! Please note that the above are basic settings only. There are more parameters in this group that may be changed to suit the application.

Pr.04	Load Duty	-	1	0	Set to '0' for normal duty applications and if motor is one size bigger (KW) than inverter rating (KW)
Pr.05	Phase-loss protection	-	Binary	As required	Set to '01' for output (motor) phase loss protection, '10' for input phase loss protection, and '11' for both

No more essential parameters in this group

***3.0kHz up to 22KW

Denotes **MUST** check / set parameters for best operation

All others are relative to the design requirements of the equipment and/or application or environment.

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