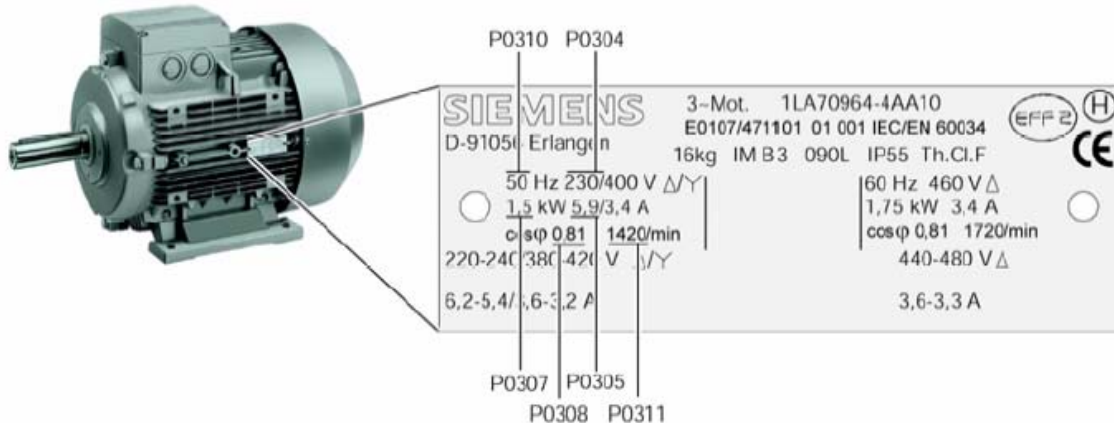


## MICROMASTER 420,440 (SIEMENS)

### A) METHOD FOR QUICK COMMISSIONING

- P10 =1, **START OF QUICK COMMISSIONING**  
P304 =MOTOR VOLTAGE RATING  
**P305 =MOTOR CURRENT**  
**P307 =MOTOR POWER RATING (KW)**  
P308 =MOTOR COS $\phi$  RATING (POWER FACTOR RATING)  
P311 =MOTOR RPM RATING



- P700 =SELECTION OF COMMAND SOURCE  
=1, FOR MANUAL OPERATION  
=5, FOR USS COMMUNICATION  
=6, FOR PROFIBUS

- P1000 =SELECTION OF COMMAND SOURCE  
=1, FOR MANUAL OPERATION  
=5, FOR USS COMMUNICATION  
=6, FOR PROFIBUS COMMUNICATION

- P1120 =RAMP UP TIME IN SECONDS (0-650SECONDS)  
P1121 =RAMP DOWN TIME IN SECONDS (0-650SECONDS)

- P3900 =1, **END OF QUICK COMMISSIONING**

**/\*\*Note to prevent the motor from getting failed due to over current\*\*//**

- P305=Motor current ( Very important )  
P610=1  
P640=100  
P290=1

## **B) MISCALENOUS PARAMETERS**

**P3 =3,TO SEE ALL THE PARAMETERS**

**R21 = TO CHECK THE MOTOR FREQUENCY**

**R27 = TO CHECK THE MOTOR CURRENT**

**P5 =DISPLAY SELECTION**

**=21, FOR CONTINUOUSDISPLAY OF FREQUENCY**

**=27,FOR CONTINUOUS DISPLAY OF CURRENT**

**=25, FOR CONINUOUS DISPLAY OF VOLTAGE**

**P295 =INVERTER FAN OFF DELAY TIME (0-3600 SECONDS)**

**P918 =INVERTER PROFIBUS ADDRESS**

**R947 =LAST FAULT CODE**

**=947[0], FAULT 1**

**=947[1], FAULT 2**

**=947[2], FAULT 3**

**R949 =FAULT VALUE**

**=949[0], FAULT VALUE 1**

**=949[1], FAULT VALUE 2**

**=949[2], FAULT VAULE 3**

**R967 =CONTROL WORD1**

Displays control word 1.

**Bitfields:**

Bit00	ON/OFF1	0 NO	1 YES
Bit01	OFF2: Electrical stop	0 YES	1 NO
Bit02	OFF3: Fast stop	0 YES	1 NO
Bit03	Pulse enable	0 NO	1 YES
Bit04	RFG enable	0 NO	1 YES
Bit05	RFG start	0 NO	1 YES
Bit06	Setpoint enable	0 NO	1 YES
Bit07	Fault acknowledge	0 NO	1 YES
Bit08	JOG right	0 NO	1 YES
Bit09	JOG left	0 NO	1 YES
Bit10	Control from PLC	0 NO	1 YES
Bit11	Reverse (setpoint inversion)	0 NO	1 YES
Bit13	Motor potentiometer MOP up	0 NO	1 YES
Bit14	Motor potentiometer MOP down	0 NO	1 YES
Bit15	Local / Remote	0 NO	1 YES

R968 =STATUS WORD 1

Displays active status word of inverter (in binary) and can be used to diagnose which commands are active.

**Bitfields:**

Bit00	Drive ready	0 NO	1 YES
Bit01	Drive ready to run	0 NO	1 YES
Bit02	Drive running	0 NO	1 YES
Bit03	Drive fault active	0 NO	1 YES
Bit04	OFF2 active	0 YES	1 NO
Bit05	OFF3 active	0 YES	1 NO
Bit06	ON inhibit active	0 NO	1 YES
Bit07	Drive warning active	0 NO	1 YES
Bit08	Deviation setpoint / act. value	0 YES	1 NO
Bit09	PZD control	0 NO	1 YES
Bit10	Maximum frequency reached	0 NO	1 YES
Bit11	Warning: Motor current limit	0 YES	1 NO
Bit12	Motor holding brake active	0 NO	1 YES
Bit13	Motor overload	0 YES	1 NO
Bit14	Motor runs right	0 NO	1 YES
Bit15	Inverter overload	0 YES	1 NO

**P1820 =REVERSE OUTPUT PHASE SEQUENCE**

P1031 =SETPOINT MEMORY OF THE MOP

=0, MOP SETPOINT WILL NOT BE STORED

=1, MOP SETPOINT WILL BE STORED

**C) PROCEDURE FOR FACTORY RESET**

P10 =30

P970 =1

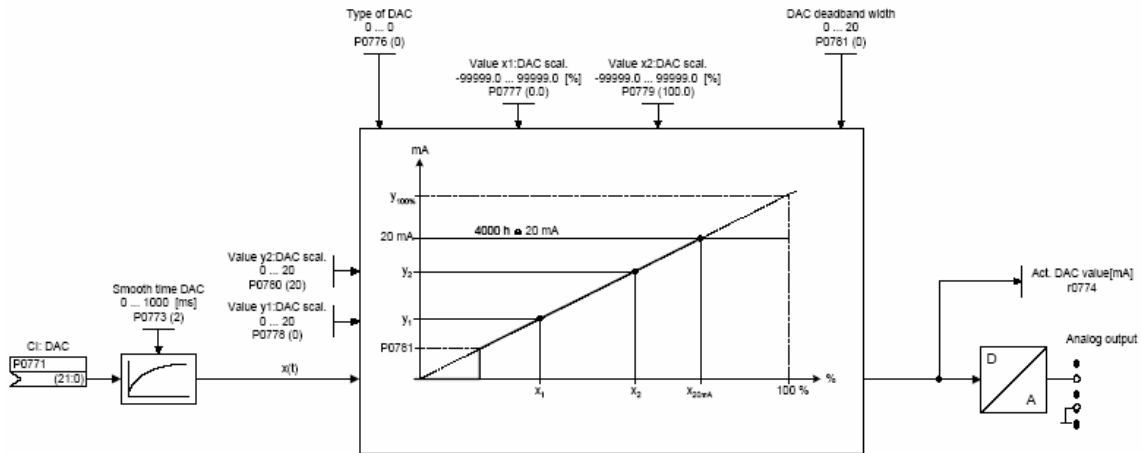
**D) PROCEDURE FOR SETTING USS COMMUNICATION**

- i) FACTORY RESET THE DRIVE
- ii) PERFORM QUICK COMMISSIONING
- P2012 =2, USS PZD LENGTH
- P2013 =127, USS PKW LENGTH
- P700 =5, COMMAND SOURCE SELECTION
- P1000 =5, FREQUENCY SOURCE SELECTION
- P2009 =0,
- P2010 =BAUD RATE
  - =5, 4800 BAUD
  - =6, 9600 BAUD
  - =7, 19200 BAUD
  - =8, 38400 BAUD
  - =9, 57600 BAUD
  - =12, 115200 BAUD
- P2011 = INVERTER USS ADDRESS (0-31)

**E) PROCEDURE FOR SETTING IF HARD WIRE OUTPUTS ARE USED**

- i) FACTORY RESET THE DRIVE
- ii) PERFORM QUICK COMMISSIONING
- P700 =2, TERMINAL INPUT
- P701 =16, FIXED FREQUENCY 1
- P702 =16, FIXED FREQUENCY 2
- P1000 =3, FIXED FREQUENCY
- P1001 =VALUE OF FIXED FREQUENCY 1 ( EXAMPLE 25 HZ)
- P1002 =VALUE OF FIXED FREQUENCY 2 (EXAMPLE 25 HZ)

PROCEDURE TO GET 4-20 MILLI AMPERE FROM TERMINAL 12, 13 OF THE DRIVE



- P771 =21, IF OUTPUT IS NEEDED CORRESPONDING TO FREQUENCY
- =27, IF OUTPUT IS NEEDED CORRESPONDING TO CURRENT
- P778 =4, VALUE Y1 FOR DAC SCALING
- P780 =20, VALUE Y2 FOR DAC SCALING
- P777 =0, VALUE X1 FOR DAC SCALING
- P779 =50.09, VALUE X2 FOR DAC SCALING
- P776 =0, IF 1 IS SELECTED 0-10VDC WILL APPEAR ACROSS 12,13 (PROVIDED 500Ω RESISTOR IS CONNECTED BETWEEN 12,13 OF DRIVE)
- R774 =ACTUAL DAC VALUE IN MA