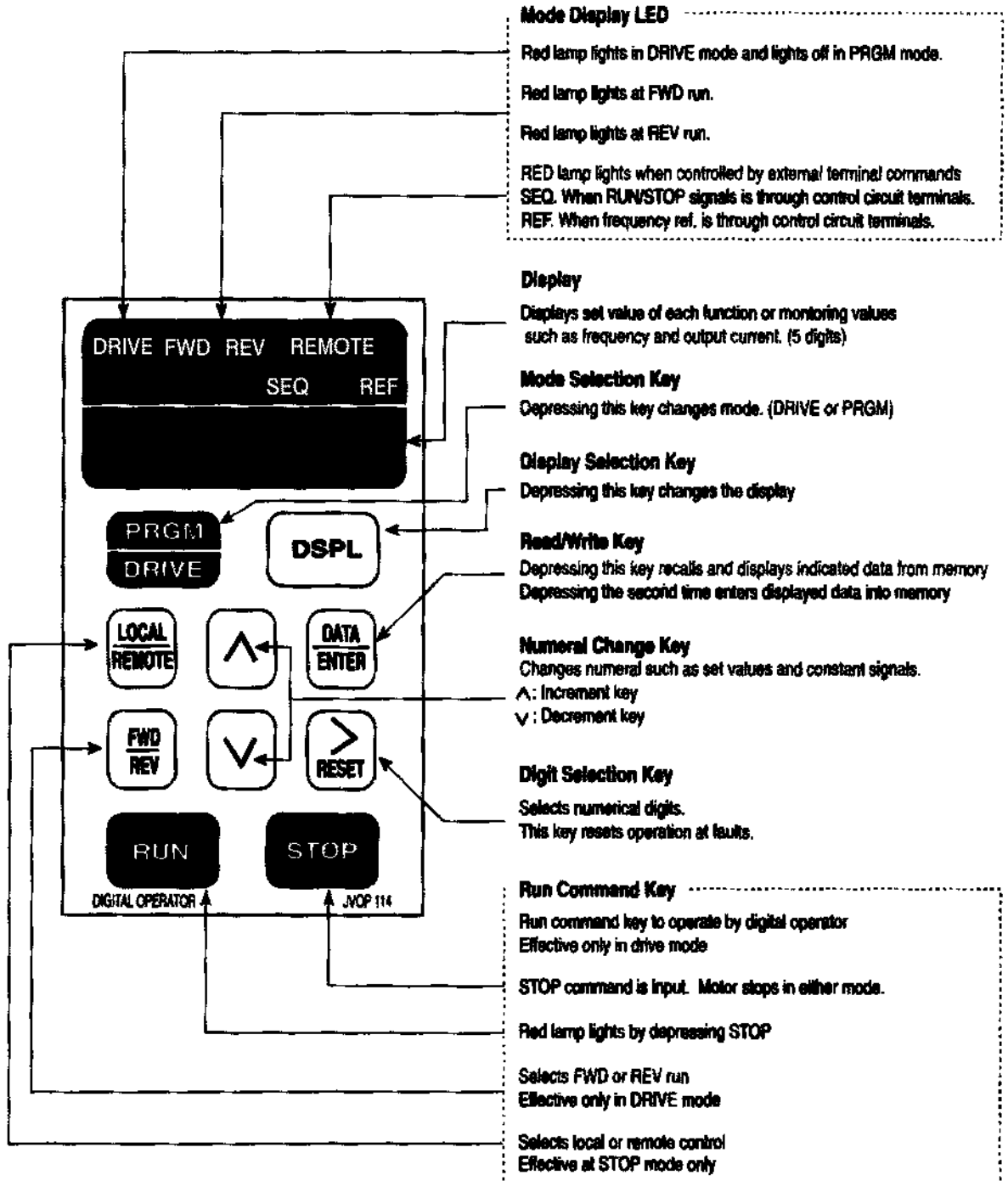
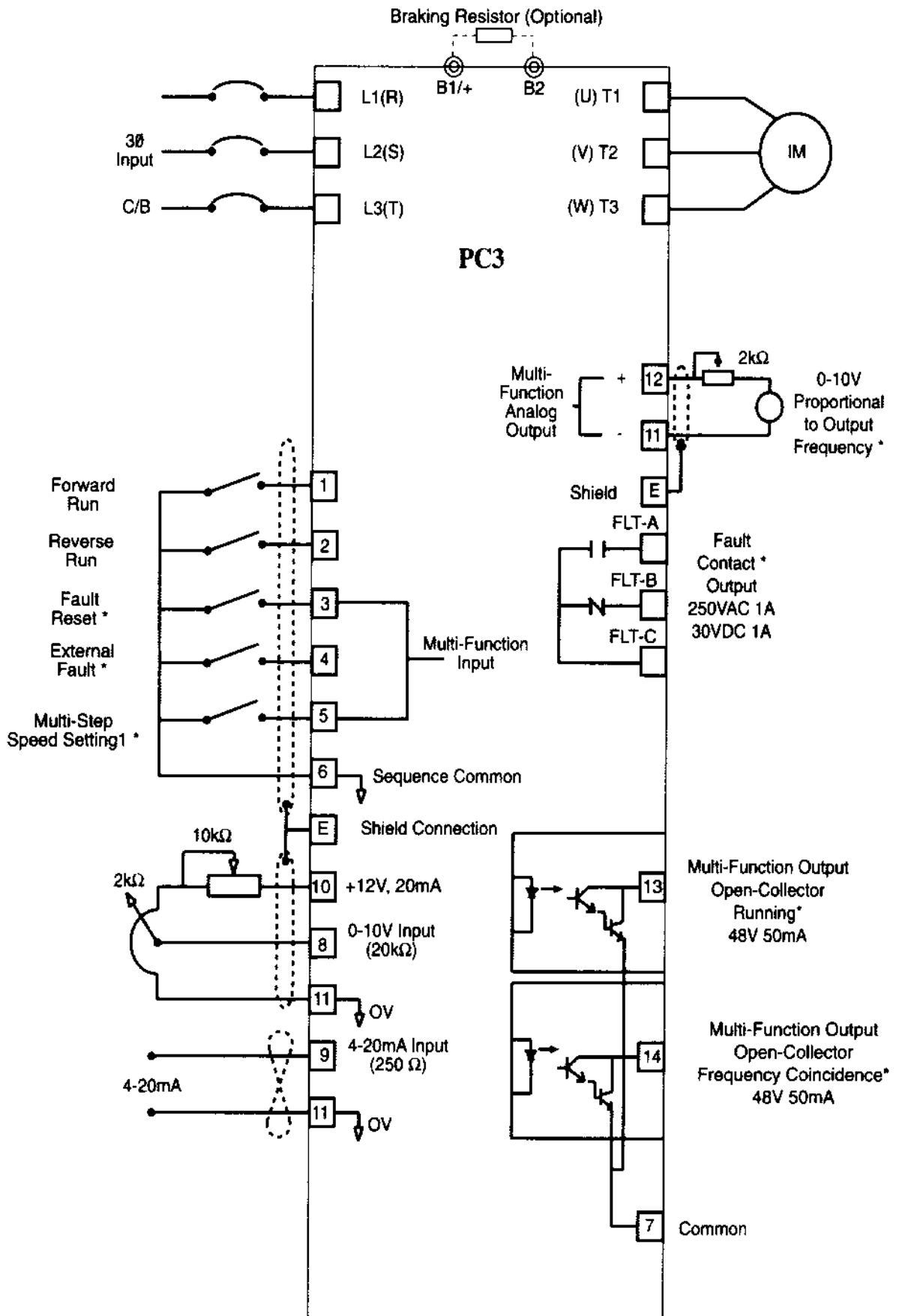


PC3 Pocket

PROGRAMMING GUIDE



Terminals and Standard Connections

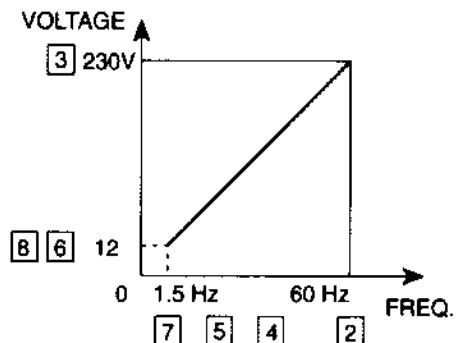
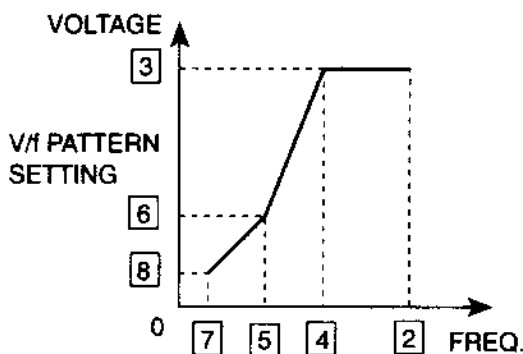


*Factory Setting

Programming Functions

FUNCTION	NO.	DIGIT	DESCRIPTION	FACTORY SETTING
CONSTANT GROUP SELECT	00	0:	PASSWORD READ/SET 00 READ ONLY 01 TO 19	1
		1:	READ/SET 00 TO 19	
		2:	READ/SET 00 TO 29	
		3:	READ/SET 00 TO 59	
		6:	FAULT RECORD CLEAR	
FAULT CONSTANTS		8:	2 WIRE INITIALIZATION	
CONSTANT INITIALIZATION		9:	3 WIRE INITIALIZATION	
OPERATION METHOD	01	1	0-EXTERNAL FREQ. REF.	←
			1-KEYPAD FREQ. REF.	
STOPPING METHOD	01	2	0-EXTERNAL RUN COMMAND	←
			1-KEYPAD RUN COMMAND	
PATTERN SETTING	01	3	0-DECEL TO A STOP	←
			1-COAST TO A STOP	
PATTERN SETTING	01	4	0-v/f w/VOLTAGE LIMITER	←
			1-v/f w/o VOLTAGE LIMITER	
V/F PATTERN SETTING	02	MAXIMUM OUTPUT FREQUENCY	UNIT: 0.1 Hz RANGE: 50 TO 400 Hz	60 Hz
	03	MAXIMUM VOLTAGE	UNIT: 0.1V RANGE: 0.1 TO 255.0V*	230V*
	04	MAX. VOLTAGE OUTPUT FREQUENCY	UNIT: 0.1 Hz RANGE: 0.2 TO 400.0 Hz	60 Hz
	05	INTERMEDIATE OUTPUT FREQUENCY	UNIT: 0.1 Hz RANGE: 0.1 TO 399.9 Hz	1.5 Hz
	06	INTER. OUT FREQUENCY VOLTAGE	UNIT: 0.1V RANGE: 0.1 TO 255.0V*	12.0*
	07	MINIMUM OUTPUT FREQUENCY	UNIT: 0.1 Hz RANGE: 0.1 TO 10 Hz	1.5 Hz
	08	MIN. OUT FREQUENCY VOLTAGE	UNIT: 0.1V RANGE: 0.1 TO 50V*	12.0 V*

* X2 for 460V units.



Programming Functions

FUNCTION	NO.	DIGIT	DESCRIPTION	FACTORY SETTING
FIRST ACCEL/ DECEL TIME SETTING	09		ACCEL TIME 1 0.0 TO 600.0 S	10.0 S
	10		DECEL TIME 1 0.0 TO 600.0 S	10.0 S
SECOND ACCEL/ DECEL TIME SETTING	11		ACCEL TIME 2 0.0 TO 600.0 S	10.0 S
	12		DECEL TIME 2 0.0 TO 600.0 S	10.0 S
FREQUENCY REFERENCE	13		FREQUENCY REF. 1 0 TO 400 Hz	0.0 Hz
	14		FREQUENCY REF. 2 0 TO 400 Hz	0.0 Hz
	15		FREQUENCY REF. 3 0 TO 400 Hz	0.0 Hz
	16		FREQUENCY REF. 4 0 TO 400 Hz	0.0 Hz
	17		JOG FREQUENCY REF 0 TO 400 Hz	6.0 Hz
ELECTRONIC THERMAL OVERLOAD MOTOR PROTECTION	18	1	0: ELEC THERMAL O/L PROVIDED	0000
			1: ELEC THERMAL O/L NOT PROVIDED	
		2	0: STANDARD MOTOR O/L	
			1: SPECIALIZED MOTOR O/L	
3/4	NOT USED			
REFERENCE CURRENT	19		MOTOR RATED CURRENT 10 TO 120% OF RATED CURRENT	DEPENDENT ON INVERTER RATING
REV RUN PROHIBIT	20	1	0: REV RUN ENABLED	0000
			1: REV RUN DISABLED	
STALL PREVENTION DURING DECEL		4	0: STALL PREVENTION PROVIDED	
			1: STALL PREVENTION NOT PROVIDED	
ANALOG MONITOR SELECTION	21	2	0: MONITOR OUTPUT FREQUENCY	0000
			1: MONITOR OUTPUT CURRENT	
S-CURVE ACCEL/DECEL SELECTON		3	0: S-CURVE NOT PROVIDED	
	1: S-CURVE PROVIDED			
REFERENCE INPUT	22		FREQUENCY REFERENCE GAIN	1.0
	23		FREQUENCY REFERENCE BIAS	0.00
FREQUENCY LIMIT CONTROL	24		FREQUENCY UPPER LIMIT	100%
	25		FREQUENCY LOWER LIMIT	0%
DC INJECTION BRAKING	26		DC INJECTION BRAKE CURRENT	50%
	27		DC INJECTION TIME AT STOP	0.0S
	28		DC INJECTION TIME AT START	0.0S
TORQUE COMP	29		AUTOMATIC TORQUE BOOST GAIN	1.0
STALL PREVENTION	30		STALL PREVENTION WHILE RUNNING	170%
	31		STALL PREVENTION WHILE ACCEL	160%
CONTACT INPUT SIGNAL	32		MULTI-FUNCTION INPUT 1 TERM.,#3	13
	33		MULTI-FUNCTION INPUT 2 TERM.,#4	1
	34		MULTI-FUNCTION INPUT 3 TERM.,#5	3
AUX INPUT	35		MULTI-FUNCTION ANALOG INPUT	0
CONTACT OUTPUT SIGNAL	36		MULTI-FUNCTION OUTPUT SELEC- TION 1 TERMINALS FLT-A,-B, & -C	5
PHC OUTPUT SIGNAL	37		MULTI-FUNCTION OUTPUT 2 TERM.,#13	0
	38		MULTI-FUNCTION OUTPUT 3 TERM.,#14	1

Programming Functions

SET VALUE	PROGRAM FUNCTION 32-33-34 FUNCTION (INPUT)
0	FWD/REV 3 WIRE CONTROL *
1	EXTERNAL FAULT (NO)
2	EXTERNAL FAULT (NC)
3	MULTI-STEP SPEED REF 1
4	MULTI-STEP SPEED REF 2
5	JOG COMMAND
6	ACCEL/DECEL TIME SELECT
7	EXTERNAL BASE BLOCK (NO)
8	EXTERNAL BASE BLOCK (NC)
9	SEARCH COMMAND FROM MAX FREQ
10	SEARCH COMMAND FROM SET FREQ
11	ACCEL/DECEL HOLD COMMAND
12	LOCAL/REMOTE SELECT
13	ALARM RESET
14	UP/DOWN FUNCTION **
* AVAILABLE AT FNC 32 ONLY	
** AVAILABLE AT FNC 34 ONLY	

SET VALUE	PROGRAM FUNCTION 36-37-38 FUNCTION (OUTPUT)
0	IN OPERATION
1	FREQUENCY AGREED
2	ZERO SPEED
3	FREQUENCY DETECTION (OUTPUT FREQ ≥ FREQ DET LEVEL)
4	OVERTORQUE DETECTION
5	FAULT
6	FREQUENCY DETECTION (OUTPUT FREQ ≤ FREQ DET LEVEL)
7	DURING BASE BLOCK
8	DURING UNDER VOLTAGE
9	DURING SPEED SEARCH
10	OPERATION MODE LOCAL/REMOTE

FUNCTION	NO.	DIGIT	DESCRIPTION	FACTORY SETTING
DESIRED SPEED	39	FREQUENCY DETECTION LEVEL		0.0 Hz
OVER-TORQUE DETECTION	40	1	0: OT DETECTION NOT PROVIDED	0000
			1: OT DETECTION PROVIDED	
		2	0: DETECTED ONLY FREQ AGREE	
			1: DETECTED DURING RUNNING	
	3	0: OPERATION CONTINUES AFTER		
		1: OUTPUT SHUT OFF @ OT		
	4	NOT USED		
	41	OVERTORQUE DETECTION LEVEL		160%
	42	OVERTORQUE DETECTION TIME		0.1 S
CARRIER FREQUENCY ADJUSTMENT	43	CARRIER FREQUENCY ADJUSTMENT 1 TO 6 (25 TO 15KHz)		4 (10KHz)
—	44	NOT USED		—
MONITOR CALIBRATION	45	ANALOG MONITOR GAIN		1.0
MOMENTARY POWER LOSS PROTECTION	46	1	0: NOT PROVIDED	0000
			1: PROVIDED	
FAULT RETRY	47	FAULT RETRY SELECTION 0-10		0
RECORD	48	LATEST FAULT IS DISPLAYED		—
SOFTWARE VERSION	49	PROM NUMBER IS DISPLAYED		—
PROHIBITED FREQUENCY	50	PROHIBITED FREQUENCY RANGE: 0.0 TO 400 Hz		0.0 Hz
	51	PROHIBITED FREQUENCY WIDTH RANGE: 0.0 TO 25.5 Hz		1.0 Hz
—	52 TO 59	NOT USED (SETTING DISABLED)		—

Faults

MONITOR DISPLAY	FUNCTION	FAULT
U _U I	UNDER VOLTAGE	DC BUS BELOW DETECTION LEVEL
OC	OVERCURRENT	OUTPUT CURRENT ABOVE 200%
GF	GROUND FAULT	GROUND FAULT AT INV. OUTPUT
OU	OVER VOLTAGE	DC BUS TOO HIGH
—	FUSE BLOWN	POSSIBLE TRANSISTOR FAILURE
OH	OVER HEAT	COOLING FIN TOO HOT
OL1	MOTOR OVERLOAD	ELECTRONIC THERMAL O/L
OL2	INVERTER O/L	INVERSE TIME LIMIT
OL3	OVER TORQUE	OPERATION SELECTION NO. 40
EF3	EXTERNAL FAULT INPUT	EXTERNAL FAULT INPUT-MULTIFUNCTION TERMINAL
EF4		
EF5		
CPF OO TO OS	CONTROL CIRCUIT FAULT	TRANSMISSION ERRORS
		IN CONTROL CIRCUIT OR
		COMPONENT FAILURE
U _U (BLINK)	CONTROL VOLTAGE LOW	
OH (BLINK)	OVER HEAT	
OL3 (BLINK)	OVERTORQUE	
EF (BLINK)	OPERATION ERROR	FWD/REV CLOSED SIMULTANEOUS
bb (BLINK)	BASE BLOCK	MAIN CIRCUIT TRANSISTOR CUT-OFF

Notes

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