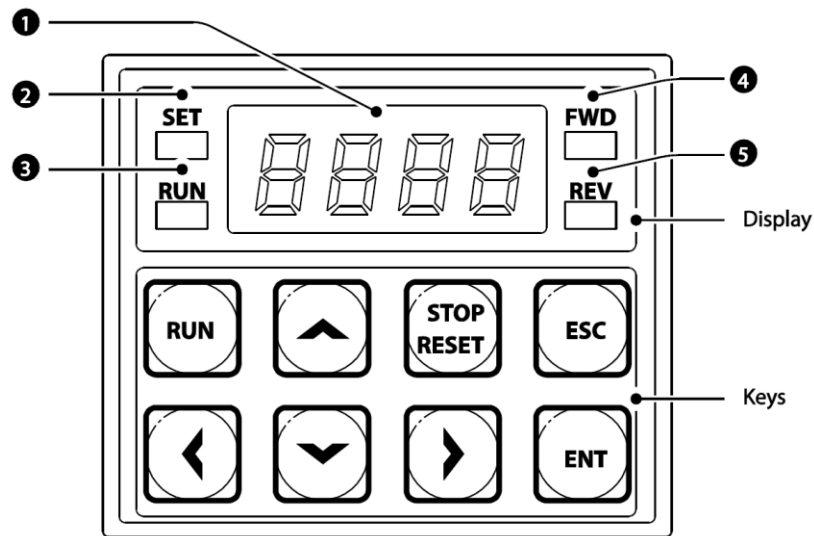


Programming and Wiring
Of
“S” Series VFD
For
Daikin (McQuay) when replacing a model “GX” VFD

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1.0 Keypad/Display Operation



2.0 Identification

No.	Name	Function
①	7-Segment Display	Displays current operational status and parameter information.
②	SET Indicator	LED flashes during parameter configuration and when the ESC key operates as the multi-function key.
③	RUN Indicator	LED turns on (steady) during an operation, and flashes during acceleration or deceleration.
④	FWD Indicator	LED turns on (steady) during forward operation.
⑤	REV Indicator	LED turns on (steady) during reverse operation.

3.0 Operation

Key	Name	Description
	[RUN] key	Used to run the inverter (inputs a RUN command).
	[STOP/RESET] key	STOP: stops the inverter. RESET: resets the inverter following fault or failure condition.
	[▲] key, [▼] key	Switch between codes, or to increase or decrease parameter values.
	[◀] key, [▶] key	Switch between groups, or to move the cursor during parameter setup or modification.
	[ENT] key	Used to select, confirm, or save a parameter value.
	[ESC] key	A multi-function key used to configure different functions, such as: <ul style="list-style-type: none"> Jog operation Remote/Local mode switching Cancellation of an input during parameter setup

4.0 Parameter Groups

Group	Display	Description
Operation	-	Configures basic parameters for inverter operation. These include reference source, control source, acceleration/deceleration times, etc. The actual speed (frequencies) during acceleration and deceleration will not be displayed on the 7-segment (LED) display, only if an LCD keypad is in use.
Drive	dr	Configures parameters for basic operations. These include jog operation, motor capacity evaluation, torque boost, and other keypad related parameters.
Basic	ba	Configures basic parameters, including motor-related parameters and multi-step frequencies.
Advanced	ad	Configure acceleration or deceleration patterns and to setup frequency limits.
Control	cn	Configures sensorless vector - related features.
Input Terminal	in	Configures input terminal-related features, including digital multi-functional inputs and analog inputs.
Output Terminal	ou	Configures output terminal-related features such as relays and analog outputs.
Communication	cm	Configures communication features for RS-485 or other communication options.
Application	ap	Configures PID control-related sequences and operations.
Protection	pr	Configures motor or inverter protection features.

5.0 Parameter Settings

Control Parameters

7 Segment Display	
Parameter	Setting
drv	1
Frq	2
bA.07	1
Ad.08	2
Ad.09	2
Ad.10	1
Cn.70	1
Cn.71	1111 ⁽¹⁾
In.65	1
Pr.40	1
Pr.42	130(%)
Pr.43	115(%)


(1) Displayed as



Motor Related Parameters

7 Segment Display			
dr.14	0	0.3 HP	Set Motor Rating
	1	0.5 HP	
	2	1.0 HP	
	3	1.5 HP	
	4	2.0 HP	
	5	3.0 HP	
	6	4.0 HP	
	7	5.0 HP	
	8	5.5 HP	
	9	7.5 HP	
	10	10 HP	
	11	15 HP	
bA.11	4	4	2 ~ 48
bA.12	80	80	0-3000(Rpm)
bA.13	**	**	1.0-1000.0(A)
bA.14	**	**	0.0-1000.0(A)
bA.15	230/460	230/460	170-480(V)
bA.16	**	**	64-100(%)
bA.19	240/480	240/480	170-480(V)
** Dependent on Motor selection, dr.14			

6.0 Parameter Descriptions

Control Parameters				
Parameter	Setting	Notes		
drv	1	Start (Run) Command to be applied to drive input terminal. See Ad.10 (note on Jumper)		
Frq	2	Tells the VFD to look for a 0 - 10 V signal on terminals V1 - CM, for speed control.		
bA.07	1	Sets V/Hz. pattern to squared for variable torque loads (fans)		
Ad.08	2	Stop Mode set to Coast		
Ad.09	2	Motor Direction – Prevent Reverse Operation		
Ad.10	1	Related to the Jumper between P1-CM. Allows the drive to start on power up (i.e. run command is always applied via jumper).		
Cn.70	1	Select Speed Search (Flying Start) function		
Cn.71	1111	All 1's (or ) for speed search during normal starting (acceleration), after a fault reset, after a power interruption and when power is applied.		
In.65	1	Sets the P1 input terminal, programmed for Start (Run) command.		
Pr.40	1	Activates The Eth function (Electronic Overload protection) and when an Eth Fault occurs, motor will coast to stop.		
Pr.42	130(%)	Set the 1 minute overload trip level. Percent is based on FLA (bA.13).		
Pr.43	115(%)	Service Factor. Sets the amount of safe continuous operating current of the motor. Percent is based on FLA (bA.13). The Eth function will not activate below this level.		
Motor Related Parameters				
Parameter	Setting		Range	Description
dr.14	0	0.3 HP	Set Motor Rating	The default setting is based on the CT rating of the drive. Ex: a 3 HP drive will default to 2 HP motor.
	1	0.5 HP		
	2	1.0 HP		
	3	1.5 HP		
	4	2.0 HP		
	5	3.0 HP		
	6	4.0 HP		
	7	5.0 HP		
	8	5.5 HP		
	9	7.5 HP		
	10	10 HP		
11	15 HP			
bA.11	4	4	2 ~ 48	Motor Poles
bA.12	80	80	0-3000(Rpm)	Slip
bA.13	**	**	1.0-1000.0(A)	Motor FLA (rated current)
bA.14	**	**	0.0-1000.0(A)	Motor No Load Current
bA.15	230/460	230/460	170-480(V)	Motor Rated Voltage
bA.16	**	**	64-100(%)	Motor Efficiency
bA.19	240/480	240/480	170-480(V)	AC Input Voltage (Source)
** Dependent on Motor selection, dr.14				

7.0 Control Drawing – Wiring

