

Specification

Rated Input and Output: Input voltage of 200V class (0.75~22kW)

Type: SV □□□iS7-2 □		0008	0015	0022	0037	0055	0075	0110	0150	0185	0220	
Motor Applied *1)	[HP]	1	2	3	5	7.5	10	15	20	25	30	
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	
Rated Output	Rated Capacity [kVA] *2)	1.9	3.0	4.5	6.1	9.1	12.2	17.5	22.9	28.2	33.5	
	Rated Current [A] *3)	CT	5	8	12	16	24	32	46	60	74	88
		VT	8	12	16	24	32	46	60	74	88	124
	Output Frequency [Hz]	0 ~ 400 [Hz] *4)										
Output Voltage [V]	3-phase 200 ~ 230V *5)											
Rated Input	Available Voltage [V]	3-phase 200 ~ 230 VAC (-15% ~ +10%)										
	Frequency [Hz]	50 ~ 60 [Hz] (±5%)										
	Rated Current [A]	CT	8.3	12.9	18.6	24	32.9	41.4	58	69	88	96
VT		7	10.6	14.8	21.5	28	42	52	60	75	107	

2.1.2 Rated Input and Output: Input voltage of 200V class (30~75kw)

Type: SV □□□iS7-2 □		0300	0370	0450	0550	0750	-	-	-	-	-	
Motor Applied	[HP]	40	50	60	75	100	-	-	-	-	-	
	[kW]	30	37	45	55	75	-	-	-	-	-	
Rated Output	Rated Capacity [kVA] *2)	46	57	69	84	116	-	-	-	-	-	
	Rated Current [A] *3)	CT	116	146	180	220	288	-	-	-	-	-
		VT	146	180	220	288	345	-	-	-	-	-
	Output Frequency [Hz]	0 ~ 400 [Hz] *4) (Sensorless -1: 0 ~ 300Hz, Sensorless -2, Vector. 0 ~ 120Hz)										
Output Voltage [V]	3-phase 200 ~ 230V *5)											
Rated Input	Available Voltage [V]	3-phase 200 ~ 230 VAC (-15% ~ +10%)										
	Input Frequency	50 ~ 60 [Hz] (±5%)										
	Rated Current [A]	CT	121	154	191	233	305	-	-	-	-	-
VT		152	190	231	302	362	-	-	-	-	-	

* Non DCR products are provided warranty service when used in CT (Heavy duty) load rating only.

Rated Input and Output: Input voltage of 400V class (0.75~22kW)

Type: SV □□□iS7-4 □		0008	0015	0022	0037	0055	0075	0110	0150	0185	0220	
Motor Applied *1)	[HP]	1	2	3	5	7.5	10	15	20	25	30	
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	
Rated Output	Rated Capacity [kVA] *2)	1.9	3.0	4.5	6.1	9.1	12.2	18.3	22.9	29.7	34.3	
	Rated Current [A] *3)	CT	2.5	4	6	8	12	16	24	30	39	45
		VT	4	6	8	12	16	24	30	39	45	61
	Output Frequency [Hz]	0 ~ 400 [Hz] *4)										
Output Voltage [V]	3-phase 380 ~ 480V *5)											
Rated Input	Available Voltage [V]	3-phase 380 ~ 480 VAC (-15% ~ +10%)										
	Frequency	50 ~ 60 [Hz] (±5%)										
	Rated Current [A]	CT	4.3	7.2	10.6	15.4	21	25.8	38.7	43.85	56.9	57.4
VT		3.5	5.3	7.3	10.8	13.8	22.5	26.1	33.2	40	52.2	

*1) Motor Applied indicates the maximum capacity of a standard 4 pole OTIS-LG motor.

*2) Rated Capacity: the input capacity of a 200V class is based on 220V and that of a 400V class is based on 440V. The current rating is based on CT current.

*3) The output of rated current is limited according to the setting of the carrier frequency (CON-04).

*4) You can set the frequency at up to 300Hz by selecting 3, 4 Sensorless-1, Sensorless-2 as the control mode (DRV-09 Control Mode).

*5) The maximum output voltage does not go over the supplied power voltage. You can select the output voltage as you want below the supplied power voltage.



Specifications

Rated Input and Output: Input voltage of 400V class (30~375kW)

Type: SV □□□iS7-4 □		0300	0370	0450	0550	0750	0900	1100	1320	1600	1850	2200	2850	3150	3750	
Motor Applied ^{*1)}	[HP]	40	50	60	75	100	120	150	180	225	250	300	375	420	500	
	[kW]	30	37	45	55	75	90	110	132	160	185	220	285	315	375	
Rated Output	Rated Capacity [kVA] ^{*2)}	46	57	69	84	116	139	170	201	248	286	329	416	467	557	
	Rated Current [A] ^{*3)}	CT	61	75	91	110	152	183	223	264	325	370	432	547	613	731
		VT	75	91	110	152	183	223	264	325	370	432	547	613	731	877
	Output Frequency [Hz]	0 ~ 400 [Hz] (Sensorless-1: 0 ~ 300Hz, Sensorless-2, Vector: 0 ~ 120Hz) ^{*4)}														
Output Voltage [V]	3-phase 380 ~ 480V ^{*5)}															
Rated Input	Available Voltage [V]	3-phase 380 ~ 480 VAC (-15% ~ +10%)														
	Frequency [Hz]	50 ~ 60 [Hz] (±5%)														
	Rated Current [A]	CT	57	69	83	113	154	195	239	286	362	404	466	605	674	798
VT		90	109	123	162	195	237	282	350	403	463	590	673	796	948	

^{*1)} Motor Applied indicates the maximum capacity of a standard 4 pole OTIS-LG motor.

^{*2)} Rated Capacity: the input capacity of a 200V class is based on 220V and that of a 400V class is based on 440V. The current rating is based on CT current.

^{*3)} The output of rated current is limited according to the setting of the carrier frequency (CON-04).

^{*4)} You can set the frequency at up to 300Hz by selecting 3, 4 Sensorless-1, Sensorless-2 as the control mode (DRV-09 Control Mode).

^{*5)} The maximum output voltage does not go over the supplied power voltage. You can select the output voltage as you want below the supplied power voltage.

Control

Control Method	V/F control, V/F PG, slip compensation, sensorless vector control, vector control
Frequency Setting Resolution	Digital command: 0.01Hz Analog command: 0.06Hz (maximum frequency: 60Hz)
Frequency Tolerance	Digital command operation: 0.01% of the maximum frequency Analog command operation: 0.1% of the maximum frequency
V/F Pattern	Linear, double reduction, user V/F
Overload Capacity	CT current rating :150% for 1 minute, 200% for 22 seconds, VT current rating :110% for 1 minute
Torque Boost	Manual torque boost, automatic torque boost

Specifications

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Operating Method		Selectable among keypad/terminal block/communication operation	
Frequency Setting		Analog: 0 ~ 10[V], -10 ~ 10[V], 0 ~ 20[mA] Digital: keypad	
Operating Function		PID control, up-down operation, 3-wire operation, DC brake, frequency limit, frequency jump, second function, slip compensation, reverse rotation prevention, auto restart, inverter by-pass, auto tune flying start, energy buffering, power braking, flux braking, leakage current reduction, MMC, easy start	
Input	Multi-function terminal (8 points) P1 ~ P81 ^{*1)}	NPN / PNP selectable	
		Function: forward operation; reverse operation; reset; external trip; emergency stop; jog operation; sequential frequency-high; medium and low; multi-level acceleration and deceleration-high; medium and low; D.C. control during stop; selection of a second motor; frequency increase; frequency decrease; 3-wire operation; change to general operation during PID operation; main body operation during option operation; analog command frequency fixation; acceleration and deceleration stop selectable	
Output	Multi-function open collector terminal	Inverter fault output	Below DC 24V 50mA
	Multi-function relay terminal		Below (N.O., N.C.) AC250V 1A, Below DC 30V 1A
	Analog output	0 ~ 10 Vdc (below 10mA): selectable from frequency, current, voltage, direct current voltage	

^{*1)} The Functions for Multi-function terminal available according to IN-65~72 parameter setting of IN Group.

Protective Functions

Trip	Over voltage, low voltage, over current, over current detection, inverter overheat, motor thermal protection, phase loss protection, overload protection, communication error, frequency command loss, hardware failure, cooling fan failure, pre-PID failure, no motor trip, external brake trip. etc
Alarm	Stall prevention, overload, diminished load, encoder error, fan failure, keypad command loss, speed command loss.
Instantaneous Interruption ^{*2)}	Below CT class 15 msec (VT class 8 msec): operation continues (within rated input voltage, rated output)
	Over CT class 15 msec (VT class 8 msec): automatic restart

^{*2)} Operation at the CT (Heavy Duty) current rating

Structure and Use Environment

Cooling Method	Forced air blast cooling: 0.75 ~ 15kW (200/400V class), 22kW (400V class) Inhalation cooling: 22 ~ 75kW (200V class), 30 ~ 160kW (400V class)
Protection Structure	Below 75kW: Open Type(IP21), UL enclosed type 1(Option) ^{*3)} 30 ~ 75kW 200V, Above 90kW: Open type(IP00) The others (Below 22kW): Enclosed IP54 type, UL enclosed type 12
Surrounding Temperature	CT (Heavy Duty) load: -10 ~ 50°C, (14 ~ 122°F) without ice or frost VT (Normal Duty) load: -10~ 40°C (14 ~ 122°F) without ice or frost (It is recommended that you use less than 80% load when you use VT load at 50°C (122°F)) IP54 product: -10~40°C (14~122°F) without ice or frost
Preservation Temperature	-20 ~ 65°C (-4 ~ 149°F)
Surrounding Humidity	Below 90% RH of relative humidity (with no dew formation)
Altitude, Vibration	Below 1,000m (3280 ft), below 5.9m/sec 2 (19.36 ft/sec 2, 0.6G)
Environment	There should be no corrosive gas, flammable gas, oil mist or dust. Pollution Degree 2 Environment

^{*3)} UL Enclosed type 1 with conduit box installed