# **Next Generation Yaskawa New Series Drive**

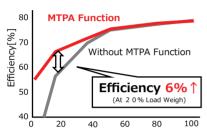
INCREASED PRODUCTIVITY. ENERGY SAVING. COST REDUCTION. ENVIRONMENTAL FRIENDLINESS

**FLEXIBLE** 

# (Further Energy Savings)

The energy-saving effect improves by the new function that minimizes the power consumption of the motor.

### **Inverter + Motor Total Efficiency**



## Adjustable to any motor

With new function EZ vector control, all motors can be driven by auto tuning.



#### **Global Standards**

Meets major standards of the world and regions





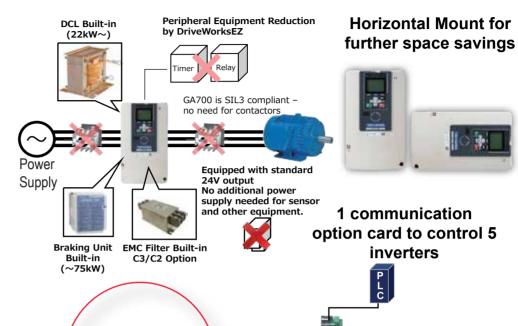


ClassNK

# High Security & Safety

Equipped with STO, two-terminal input (safety shut-off torque). Fulfilling IEC/EN61508 SIL3 and ISO13849-1 Cat.3 PLe, high degree of safety system can be built without any additional equipment such as an electromagnetic contactor system, saving wiring and space

# **Total Cost Reduction**



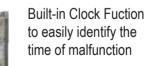


**EASY** 

Easy backup, restore and replication of parameters on keypad



MicroSD for data logging storage



Change Parameters ·A1-02=5

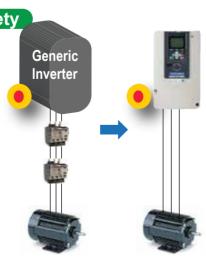
·d1-01=20 ·L1-01=2



indicates operation conditions

Access to Bluetooth built-in keypads option from portable devices.

Parameter backup using cloud



**SUSTAINABLE** 

# **Standard Specifications**

### 200V

Catalog Code: GA70A2□			2004	2006	2008	2010	2012	2018	2021	2030	2042	2056	2070	2082	2110	2138	2169	2211	2257	2313	2360	2415
Max. Application HD		0.55	0.75	1.1	1.5	2.2	3	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	
Motor Capacity (kW) * ND		0.75	1.1	1.5	2.2	3	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	-	
Output	Rated Output	HD	3.2	5	6.9	8	11	14	17.5	25	33	47	60	75	88	115	145	180	215	283	346	415
	Current (A)	ND	3.5	6	8		12.2			30	42	56	70	82	110	138	169	211	257	313	360	-
	Overload Tolerance			<ul> <li>HD Rating: 150% of output current for 60 s, ND Rating: 110% of output current for 60 s</li> <li>Note: Derating may be required for applications that start and stop frequently.</li> </ul>																		
	Carrier Frequency	Derating the output current enables a maximum of 15 kHz to be set.  (Derating the output current is not neccessary for an ND rating of 2 kHz and an HD rating up to 8 kHz)  5 kHz Note: Can be selected between 1 kHz to 10 kHz by setting C6-0														)2						
	Max. Output Volt (V)	Three-phase $200V{\sim}240V$ Note: The maximum output voltage is proportional to the input voltage.																				
	Max. Output Frequency (Hz)		590Hz  The frequencies that can be set vary depending on the control mode used.																			
Harmonic Suppression	DC Reactor		Option Built-in																			
Braking Function				Built-in Option																		
EMC Filter	EMC Filter IEC61800-3,C2/0	23	Built-in (Factory Option)																			
Power	Rated Voltage/ Rated Frequency		$\cdot$ Three-phase AC power supply : 200V $\sim$ 240V 50/60 Hz $\cdot$ DC power supply : 270V $\sim$ 340V																			
	Allowable Voltage Fluctuation	Э		-15%~+10%																		
	Allowable Freque Fluctuation	ncy		±5%																		

<sup>\*:</sup> The motor capacity(kW) refers to a Yaskawa 6-pole, 220V motor. The rated output current of the drive output amps should be equal to or greater than the motor rated current.

#### 400V

Catalog Code: GA70A4□			4002	4004	4005	4007	4009	4012	4018	4023	4031	4038	4044	4060	4075	4089	4103
Max Application Motor Capacity (kW) * HD ND		0.55	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45	
		0.75	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	
Output	Rated Output Current (A)	HD	1.8	3.4	4.8	5.5	7.2	9.2	14.8	18	24	31	39	45	60	75	91
	Rated Output Carrent (77)	ND	2.1	4.1	5.4	7.1	8.9	11.9	17.5	23.4	31	38	44	59.6	74.9	89.2	103
	Overload Tolerance	<ul> <li>HD Rating: 150% of output current for 60 s, ND Rating: of output current 110% for 60 s</li> <li>Note: Derating may be required for applications that start and stop frequently.</li> </ul>															
	Carrier Frequency	Derating the output current enables a maximum of 15 kHz to be set. (Derating the output current is not neccessary for an ND rating of 2 kHz and an HD rating up to 8 kHz)															
	Max. Output Voltage (V)	Three-phase $380V{\sim}480V$ Note: The maximum output voltage is proportional to the input voltage.															
	Max. Output Frequency (H	590Hz The frequencies that can be set vary depending on the control mode used.															
Harmonic Suppression	DC Reactor	option Built-in															
Braking Function	Braking Transistor	Built-in															
EMC Filter	EMC Filter IEC61800-3,C2,										ctory O						
Power	Rated Voltage/Rated Frequ		• Thr	ee-pha	se AC p	ower s	supply 3				z · DC	power	supply	540V~	√680V		
	Allowable Voltage Fluctuat	-15%~+10%															
	Allowable Frequency Fluctuation			±5%													
Model			4140	) 4	1168	420	8	4250	429	6	4371	438	9	4453	456	8	4675
Max Application Motor Capacity (kW) * HD ND		55		75	90		110	132	2	160	200		220	250		315	
		75		90	110	)	132	160	)	200	220	)	250	31.		355	
Output	Rated Output Current (A)	HD	112		150	180		216	260		304	371		414	45:		605
		ND	140		168	208		250	296		371	389		453	568	-	675
	Overload Tolerance	<ul> <li>HD Rating: 150% of output current for 60s, ND Rating: 110% of output current for 60s</li> <li>Note: Derating may be required for applications that start and stop frequently.</li> </ul>															
	Carrier Frequency	Derating the output current enables a maximum of 10 kHz to be set. (Derating the output current is not neccessary for an ND rating of 2 kHz and an HD rating up to 5 kHz)  2 kHz Note: Can be selected between 1 kHz to 5 kHz by setting C6-02															
	Max. Output Voltage (V)	Three-phase $380V{\sim}480V$ Note: The maximum output voltage is proportional to the input voltage.															
	Max. Output Frequency (F	590Hz The frequencies that can be set vary depending on the control mode used.															
Harmonic Suppression	DC Reactor	Built-in															
Braking Function	Braking Transistor	Built-in Option															
EMC Filter	EMC Filter IEC61800-3,C2,	Built-in (Factory Option)															
Power	Ratewd Voltage/Rated Free	• Three-phase AC power supply 380V~480V 50/60Hz • DC power supply 510V~680V															
	Allowable Voltage Fluctuat							-15	5%~+:	10%							
	Allowable Frequency Flucti	-15%~+10% ±5%															



Yaskawa Asia Pacific Pte. Ltd. 30A Kallang Place, #06-01, Singapore 339213

Tel: +65 6282 3003 Fax: +65 6289 3003 Email: marketing@yaskawa.com.sg Website: www.yaskwa.com.sg