

HV600

VARIABLE FREQUENCY DRIVES FOR HVAC BUILDING AUTOMATION

The HV600 builds on decades of experience providing variable frequency drives for HVAC applications. Specifically designed for building automation applications, the HV600 helps minimize energy costs and maximize occupant comfort. The HV600 features a simple, efficient setup with a high contrast display and supports connection to your mobile device while using Yaskawa's free DriveWizard Mobile.

Available in IP20/UL Type 1, IP55/UL Type 12 (with and without switch) and IP20/Protected Chassis versions, the HV600 is the perfect choice for reliable fan and pump control.



RATINGS

208 V Models						
HP	NEMA kW (208 V) IEC kW (220 V)	Output Amps	Frame	Catalog Code HV600□□□□□□□□		
				IP20/ UL Type 1	IP55/ UL Type 12*	IP20/ Protected Chassis
3	2.2	10.6	1	2011CFA	2011C□□	--
5	3.7	16.7	1	2017CFA	2017C□□	--
7.5	5.5	24.2	2	2024CFA	2024C□□	--
10	7.5	30.8	2	2031CFA	2031C□□	--
15	11	46.2	3	2046CFA	2046C□□	--
20	15	59.4	3	2059CFA	2059C□□	--
25	18.5	74.8	4	2075CFA	2075C□□	--
30	22	88	4	2088CFA	2088C□□	--
40	30	114	4	2114CFA	2114C□□	--
50	37	143	6	2143CFA	--	--
60	45	169	6	2169CFA	--	--
75	55	211	9	--	--	2211CBA
100	75	273	9	--	--	2273CBA

* IP55/UL Type 12 models without switch end in CVA.
IP55/UL Type 12 models with switch end in CTA

480 V Models							
HP	NEMA kW (460 V)	IEC kW (400 V)	Output Amps	Frame	Catalog Code HV600□□□□□□□□		
					IP20/ UL Type 1	IP55/ UL Type 12*	IP20/ Protected Chassis
3	2.2	1.5	4.8	1	4005CFA	4005C□□	--
5	3.7	3	7.6	1	4008CFA	4008C□□	--
7.5	5.6	4	11	1	4011CFA	4011C□□	--
10	7.5	5.5	14	1	4014CFA	4014C□□	--
15	11.2	7.5	21	2	4021CFA	4021C□□	--
20	15	11	27	2	4027CFA	4027C□□	--
25	18.6	15	34	2	4034CFA	4034C□□	--
30	22	18.5	40	3	4040CFA	4040C□□	--
40	30	22	52	3	4052CFA	4052C□□	--
50	37	30	65	3	4065CFA	4065C□□	--
60	45	37	77	4	4077CFA	4077C□□	--
75	56	45	96	4	4096CFA	4096C□□	--
100	75	55	124	4	4124CFA	4124C□□	--
125	93	75	156	6	4156CFA	--	--
150	112	90	180	9	--	--	4180CBA
200	150	110	240	9	--	--	4240CBA
250	186	160	302	10	--	--	4302CBA

DIMENSIONS inches (mm)

IP20/UL Type 1			
Frame Size	Height	Width	Depth
1	14.1 (357)	4.9 (124)	8.6 (218)
2	17.6 (447)	4.9 (124)	9.2 (233)
3	20.1 (510)	7.9 (200)	9.3 (237)
4	21.3 (542)	10 (255)	10.4 (263)
6	30.5 (774)	12.3 (312)	15.7 (400)

IP55/UL Type 12			
Frame Size	Height	Width	Depth
1	14.1 (357)	4.9 (124)	9 (228)
2	17.6 (447)	4.9 (124)	9.6 (243)
3	20.1 (510)	7.9 (200)	9.7 (247)
4	21.3 (542)	10 (255)	10.7 (273)

IP55/UL Type 12 with Switch			
Frame Size	Height	Width	Depth
1	20.4 (518)	4.9 (124)	10 (254)
2	24.5 (622)	4.9 (124)	10.5 (267)
3	31.0 (787)	7.9 (200)	10.9 (277)
4	39.0 (991)	11.4 (290)	12.0 (305)

IP20/Protected Chassis			
Frame Size	Height	Width	Depth
9	27.6 (701)	12.3 (312)	16.5 (419)
10	31.5 (800)	17.3 (439)	18.6 (472)

HV600 SPECIFICATIONS

SPECIFICATIONS

Item	Specification
Input Voltage	Three-phase 200 to 240 VAC, 380 to 480 VAC, +10%/-15%, 50/60 Hz +/-5% For single phase input ratings, Contact Factory
Ambient Operating	-10°C to +50°C (14°F to 122°F), up to 60°C (140°F) with derating
Ambient Storage	-20°C to +70°C (-4°F to 158°F)
Overload Capacity	110% for 60 seconds, 140% for 2 seconds, 175% instantaneous
Output Frequency	0 to 400 Hz
Environmental	1,000 meters altitude, up to 4,000 meters with derating
	Class 3C2 and 3S2 operation for IP20/UL Type 1, Class 3C2 and 3S3 for IP55/UL Type 12
	95% humidity, non-condensing
	IP20/UL Type 1 and IP55/Type 12 plenum rated
EMC and Harmonics	EMC filter built in; complies with IEC 61800-3 restricted distribution for first environment
	5% split choke built in both positive and negative DC bus leg as standard
Control Methods	Open Loop V/f
	Open Loop Vector (PM motors only)
Motor Types	Induction
	Permanent Magnet
	Synchronous Reluctance
Protective Design Types	IP20/UL Type 1
	IP55/UL Type 12
	IP20/Protected Chassis
Interface	LCD keypad with Hand-Off-Auto and Status Ring, Bluetooth option
Global Certifications	UL, cUL, CE, RoHS 2, WEEE, TUV SUD
Seismic Certification	CBC, IBC, ASCE7, ICC-ES 156
	HCAI (Special Seismic Certification Pre-approval OSP-0687)
Functional Safety	Safe Torque Off, SIL3 according to IEC 62061, PLe according to ISO 1384
Standard I/O	(7) programmable multi-function digital inputs (24 VDC)
	(2) programmable multi-function analog inputs (0 to +10 VDC, 0-20 mA, 4-20 mA)
	(2) Functional Safety inputs
	(1) fault relay output (Form C)
	(3) programmable multi-function relay outputs (Form A)
24 VDC power	(2) programmable multi-function analog output (0 to +10 VDC, 0-20 mA, 4-20 mA)
	External supply input to maintain communications without main power 150 mA output for customer use
Network Communications	Built in: BACnet® MSTP, Siemens APOGEE® FLN P1, Johnson Controls Metasys® N2, and Modbus® RTU
	Optional: LonWorks®, EtherNet/IP™ and Modbus® TCP/IP
Software Support Tools	DriveWizard® HVAC
	DriveWizard Mobile
	Programming Simulator
	Energy Savings Predictor
	Harmonics Estimator
	DriveWorksEZ®

IT'S PERSONAL