HPI - INTEGRAL DRIVE

DRIVE SPECIFICATIONS

MAIN SUPPLY (L1 L2 L3)

Supply Fre□uency	48 - 62Hz
Supply Voltage	3 x 380/480V □ 10□
Max. Imbalance of supply voltage	□ 2□ of rated supply
Switching on supply voltage	Once every 2 minutes

OUTPUT RATINGS

Output Current	100□ Drive Rated Power continuously
Overload Capacity	150□ for 60 secs

CONTROL SPECIFICATION

Control Method	Sensorless AC Vector Control
Max PWM Fre□uency	12kHz
Fre□uency range	up to 400 Hz
Resolution on output fre□uency	0.1□
Current/speed sampling time	83µs

DIGITAL INPUTS

Programmable digital inputs	4
Voltage level	0-24V_{dc} (user selectable npn or pnp)

PULSE INPUT

Programmable pulse input	1
Voltage level	0□24V_{dc}
Max fre□uency	10kHz

ANALOG INPUT

Programmable analog voltage input	1
Voltage Level	0□10V_{dc}
Input Resistance Rin	10KΩ
Resolution	12bit
Programmable analog current inputs	1
Current Range	0□20mA
Input Resistance Rin	500Ω
Resolution	12bit

DRIVE SPECIFICATIONS

RELAY OUTPUT

Programmable relay output	1 (n.o. n.c. com)
Max terminal load	250Vac 2A 500VA

BUS COMUNICATION

RS485 or Canbus	For cascade mode
RS485	Serial comunication
Canbus	Can-Open

EXTERNALS

Enclosure	IP55
Vibration test	EC 60068-2-6
Max relatively umidity	95% (IEC 60068-2-3)
Operating ambient temperature	0÷40°C
Storage ambient temperature	- 25°C÷60°C
Min. ambient temperature at full operation	0°C
Altitude	0 - 3000m, derate 1% per 100m above 1000m

COMPLIANCE WITH STANDARDS

EN 61800-3:2004	Adjustable speed electrical power drive systems. EMC requirements
IEC 61800-5-1	Adjustable speed electrical drive systems - part 5-1: safety requirements - electrical, thermal and energy
EN 60204-1	Safety of machinery - electrical EMC equipment of machines - part 1:general rules

PROGRAMMING

Keypad	Yes
PC	Yes

HPI - INTEGRAL DRIVE
1500 MIN $^{-1}$

TEMPERATURE RISE TO CLASS B

Type	Rated speed	Rated power	Rated torque	Peak torque	Motor Rated current	Motor Peak current	Efficiency HPI	Rated input current 380 Vac	Rated input current 480 Vac	Torque constant	Weight HPI
	n 1/min	P_n kW	M_n Nm	M_{pk} Nm	I_n Arms	I_{pk} Arms	η %	I_{in} Arms	I_{in} Arms	K_t Nm/A	Kg
1500 min^{-1}											
HPI71 1500 12	1500	0.55	3.5	5.3	1.2	1.8	81.1%	1.3	1.0	3	7.3
HPI71 1500 16	1500	0.75	4.8	7.2	1.6	2.4	81.8%	1.7	1.4	3	7.9
HPI71 1500 23	1500	1.1	7	10.5	2.3	3.5	83.3%	2.5	2.0	3	8.7
HPI71 1500 32	1500	1.5	9.6	14.4	3.2	4.8	84.1%	3.4	2.7	3	9.5
HPI90 1500 32	1500	1.5	9.6	14.4	3.2	4.8	87.6%	3.4	2.7	3	13.5
HPI90 1500 47	1500	2.2	14.0	21.0	4.7	7.0	88.3%	4.9	3.9	3	15.5
HPI90 1500 64	1500	3.0	19.1	28.7	6.4	9.6	88.6%	6.6	5.2	3	17.5
HPI90 1500 85	1500	4.0	25.5	38.3	8.5	12.7	89.0%	8.8	7.0	3	20.5
HPI112 1500 85	1500	4.0	25.5	38.3	8.5	12.7	89.0%	8.7	6.9	3	28.5
HPI112 1500 117	1500	5.5	35.0	52.5	11.7	17.5	89.1%	11.9	9.4	3	31.5
HPI112 1500 159	1500	7.5	47.8	71.7	15.9	23.9	89.5%	16.2	12.8	3	35.5
HPI112 1500 233	1500	11.0	70.0	105.0	23.3	35.0	91.0%	23.6	18.7	3	38.5
HPI132 1500 233	1500	11.0	70.0	105.0	23.3	35.0	91.1%	23.3	18.5	3	57.5
HPI132 1500 318	1500	15.0	95.5	143.7	31.8	47.8	91.3%	31.8	25.2	3	64.5
HPI132 1500 393	1500	18.5	117.8	176.7	39.3	58.9	91.5%	39.2	31.1	3	71.5

HPI - INTEGRAL DRIVE
1800 MIN $^{-1}$

TEMPERATURE RISE TO CLASS B

Type	Rated speed	Rated power	Rated torque	Peak torque	Motor Rated current	Motor Peak current	Efficiency HPI	Rated input current 380 Vac	Rated input current 480 Vac	Torque constant	Weight HPI
	n 1/min	P_n kW	M_n Nm	M_{pk} Nm	I_n Arms	I_{pk} Arms	η %	I_{in} Arms	I_{in} Arms	K_t Nm/A	Kg
1800 min^{-1}											
HPI71 1800 12	1800	0.55	2.9	4.4	1.2	1.7	83.3%	1.3	1.0	2.5	7.3
HPI71 1800 16	1800	0.75	4.0	6.0	1.6	2.4	84.9%	1.7	1.4	2.5	7.9
HPI71 1800 23	1800	1.1	5.8	8.8	2.3	3.5	85.3%	2.5	2.0	2.5	8.7
HPI71 1800 32	1800	1.5	8.0	11.9	3.2	4.8	85.8%	3.4	2.7	2.5	9.5
HPI90 1800 32	1800	1.5	8.0	11.9	3.2	4.8	87.5%	3.4	2.7	2.5	13.5
HPI90 1800 46	1800	2.2	11.7	17.5	4.6	7.0	87.9%	4.9	3.9	2.5	15.5
HPI90 1800 63	1800	3.0	15.9	23.9	6.3	9.5	88.3%	6.6	5.2	2.5	17.5
HPI90 1800 84	1800	4.0	21.2	31.8	8.4	12.7	88.6%	8.8	7.0	2.5	20.5
HPI112 1800 84	1800	4.0	21.2	31.8	8.4	12.7	89.0%	8.7	6.9	2.5	28.5
HPI112 1800 116	1800	5.5	29.2	43.8	11.6	17.4	89.0%	11.9	9.4	2.5	31.5
HPI112 1800 158	1800	7.5	39.8	59.7	15.8	23.8	89.6%	16.2	12.8	2.5	35.5
HPI112 1800 232	1800	11.0	58.4	87.5	23.2	34.9	90.0%	23.6	18.7	2.5	38.5
HPI132 1800 232	1800	11.0	58.4	87.5	23.2	34.9	91.2%	23.3	18.5	2.5	57.5
HPI132 1800 317	1800	15.0	79.6	119.4	31.7	47.5	91.5%	31.8	25.2	2.5	64.5
HPI132 1800 391	1800	18.5	98.1	147.2	39.1	58.6	91.6%	39.2	31.1	2.5	71.5

HPI - INTEGRAL DRIVE
3000 MIN -1

TEMPERATURE RISE TO CLASS B

Type	Rated speed	Rated power	Rated torque	Peak torque	Motor Rated current	Motor Peak current	Efficiency HPI	Rated input current 380 Vac	Rated input current 480 Vac	Torque constant	Weight HPI
	n 1/min	P_n kW	M_n Nm	M_{pk} Nm	I_n Arms	I_{pk} Arms	η %	I_{in} Arms	I_{in} Arms	K_t Nm/A	Kg
3000 min-1											
HPI71 3000 16	3000	0.75	2.4	3.6	1.6	2.4	85.5%	1.7	1.3	1.5	7.3
HPI71 3000 23	3000	1.10	3.5	5.3	2.3	3.5	86.9%	2.4	1.9	1.5	7.9
HPI71 3000 32	3000	1.50	4.8	7.2	3.2	4.8	87.4%	3.3	2.6	1.5	8.5
HPI71 3000 47	3000	2.20	7.0	10.5	4.7	7.0	87.7%	4.8	3.8	1.5	9.1
HPI90 3000 47	3000	2.20	7.0	10.5	4.7	7.0	86.9%	4.8	3.8	1.5	13.5
HPI90 3000 64	3000	3.00	9.6	14.4	6.4	9.6	88.4%	6.4	5.1	1.5	15.5
HPI90 3000 85	3000	4.00	12.7	19.1	8.5	12.7	88.9%	8.5	6.8	1.5	17.5
HPI90 3000 117	3000	5.50	17.5	26.3	11.7	17.5	89.4%	11.7	9.3	1.5	19.5
HPI112 3000 117	3000	5.50	17.5	26.3	11.7	17.5	88.4%	11.9	9.4	1.5	28.5
HPI112 3000 159	3000	7.50	23.9	35.9	15.9	23.9	90.0%	15.9	12.5	1.5	31.5
HPI112 3000 233	3000	11.00	35.0	52.5	23.3	35.0	90.3%	23.2	18.4	1.5	35.5
HPI112 3000 318	3000	15.00	47.8	71.7	31.8	47.8	90.5%	31.5	25.0	1.5	38.5
HPI132 3000 318	3000	15.00	47.8	71.7	31.8	47.8	90.2%	32.1	25.4	1.5	57.5
HPI132 3000 393	3000	18.50	58.9	88.4	39.3	58.9	90.8%	38.8	30.7	1.5	64.5
HPI132 3000 467	3000	22.00	70.0	105.0	46.7	70.0	91.1%	46.1	36.5	1.5	71.5

HPI - INTEGRAL DRIVE
3600 MIN $^{-1}$

TEMPERATURE RISE TO CLASS B

Type	Rated speed	Rated power	Rated torque	Peak torque	Motor Rated current	Motor Peak current	Efficiency HPI	Rated input current 380 Vac	Rated input current 480 Vac	Torque constant	Weight HPI
	n 1/min	P_n kW	M_n Nm	M_{pk} Nm	I_n Arms	I_{pk} Arms	η %	I_{in} Arms	I_{in} Arms	K_t Nm/A	Kg
3600 min^{-1}											
HPI71 3600 16	3600	0.75	2.0	3.0	1.6	2.4	86.4%	1.7	1.3	1.26	7.3
HPI71 3600 23	3600	1.1	2.9	4.4	2.3	3.5	87.2%	2.4	1.9	1.26	7.9
HPI71 3600 32	3600	1.5	4.0	6.0	3.2	4.8	97.9%	3.3	2.6	1.26	8.5
HPI71 3600 46	3600	2.2	5.8	8.8	4.6	7.0	88.1%	4.8	3.8	1.26	9.1
HPI90 3600 46	3600	2.2	5.8	8.8	4.6	7.0	88.1%	4.8	3.8	1.26	13.5
HPI90 3600 63	3600	3.0	8.0	11.9	6.3	9.5	88.7%	6.4	5.1	1.26	15.5
HPI90 3600 84	3600	4.0	10.6	15.9	8.4	12.7	89.2%	8.5	6.8	1.26	17.5
HPI90 3600 116	3600	5.5	14.6	21.9	11.6	17.4	89.7%	11.7	9.3	1.26	19.5
HPI112 3600 116	3600	5.5	14.6	21.9	11.6	17.4	89.5%	11.9	9.4	1.26	28.5
HPI112 3600 158	3600	7.5	19.9	29.8	15.8	23.8	90.1%	15.9	12.5	1.26	31.5
HPI112 3600 232	3600	11.0	29.2	43.8	23.2	34.9	90.5%	23.2	18.4	1.26	35.5
HPI112 3600 317	3600	15.0	39.8	59.7	31.7	47.5	90.7%	31.5	25.0	1.26	38.5
HPI132 3600 317	3600	15.0	39.8	59.7	31.7	47.5	90.5%	32.1	25.4	1.26	57.5
HPI132 3600 391	3600	18.5	49.1	73.6	39.1	58.6	90.9%	38.8	30.7	1.26	64.5
HPI132 3600 465	3600	22.0	58.4	87.5	46.5	69.7	91.1%	46.1	36.5	1.26	71.5

HPI - INTEGRAL DRIVE
4500 MIN $^{-1}$

TEMPERATURE RISE TO CLASS B

Type	Rated speed	Rated power	Rated torque	Peak torque	Motor Rated current	Motor Peak current	Efficiency HPI	Rated input current 380 Vac	Rated input current 480 Vac	Torque constant	Weight HPI
	n 1/min	P_n kW	M_n Nm	M_{pk} Nm	I_n Arms	I_{pk} Arms	η %	I_{in} Arms	I_{in} Arms	K_t Nm/A	Kg
4500 min^{-1}											
HPI71 4500 23	4500	1.1	2.3	7.0	2.3	3.5	86.4%	2.4	1.9	1	7.3
HPI71 4500 32	4500	1.5	3.2	3.5	3.2	4.8	87.3%	3.3	2.6	1	7.9
HPI71 4500 47	4500	2.2	4.7	6.8	4.7	7.0	88.1%	4.8	3.8	1	8.7
HPI71 4500 64	4500	3.0	6.4	7.1	6.4	9.6	88.2%	6.5	5.1	1	9.5
HPI90 4500 64	4500	3.0	6.4	9.6	6.4	9.6	88.2%	6.4	5.1	1	13.5
HPI90 4500 85	4500	4.0	8.5	9.6	8.5	12.7	88.7%	8.5	6.8	1	15.5
HPI90 4500 117	4500	5.5	11.7	12.7	11.7	17.5	89.4%	11.7	9.3	1	17.5
HPI90 4500 159	4500	7.5	15.9	17.5	15.9	23.9	89.8%	15.9	12.6	1	20.5