

Basic Drive

The best way to meet HVAC requirements is to pick a packaged solution from the hydronics experts at Taco. As America's leading pump manufacturer, no one knows better how to maximize system efficiency and lower life cycle costs. The economical Basic Drive ties Taco's power electronics to its rugged, dependable pumps for flawless performance.



Basic Drive

Product range:

200 - 240 V / 3 Phase 0.33 - 60 Hp
 380 - 480 V / 3 Phase 0.5 - 125 Hp
 525- 600V / 3 Phase 5 - 125 Hp

Enclosure rating:

IP 21/NEMA Type 1 kit

Feature	Benefit
All built-in – low investment	
Flying Start	Reduced mechanical wear on equipment
Most common HVAC protocols for BMS controller connectivity are embedded	Less extra gateway solutions needed
Built-in PI controller	No external PI controller needed
Smart Logic Controller	Often makes PLC unnecessary
Integrated fan, pump functionality	Saves external control and conversion equipment
Fire Override Mode	Enhanced safety
Save energy – less operation cost	
Automatic Energy Optimizer function	Saves 5 – 15% energy
Sleep mode	Energy saving and extended lifetime
Unequaled robustness – maximum uptime	
Available in IP 20/IP 21 options/Type 1	Enclosures to fit your needs
Robust single enclosure	Maintenance-free
Unique cooling concept with no forced air flow over electronics	Problem-free operation in harsh environments
Max ambient temp. 50° C	No external cooling
User friendly – save commissioning and operating cost	
Easy access for tools	Effective commissioning and operation
Read outs in engineering units	Alpha numeric display/improved HMI
Start up wizard	Drive set-up fast and easy
Auto restart	Saves time
Bypass frequencies	Less noise and vibrations/resonances
Global HVAC support organisation	Local service – globally
Built-in DC coils – no harmonic concerns	
Category C1 filters	Meets protection class C1, C2 and C3
Integrated dual DC-link Choke	Equivalent: 5% AC input line reactor Supporting IEEE 519-1992 requirements
Thermistor input	Prevents overheat of motor



Easy to configure

- Start up with a configuration wizard
- Easy to program parameters
- Alphanumeric display
- Hand – Off – Auto keys
- Status LCDs
- Easy to install
- Easy to wire up
- 7 languages or numeric programming



Specifications

Mains supply (L1, L2, L3)	
Supply voltage	200–240 V ±10%
Supply voltage	380–480 V ±10%
Supply voltage	525–600 V ±10%
Supply frequency	50/60 Hz
Displacement Power Factor (cos φ) near unity	(> 0.98)
Switching on input supply L1, L2, L3	1 time/minute max.
Output data (U, V, W)	
Output voltage	0–100% of supply voltage
Switching on output	Unlimited
Ramp times	1–3600 sec.
Open/Closed loop	0–400 Hz
Digital inputs	
Programmable digital inputs	4
Logic	PNP or NPN
Voltage level	0–24 VDC
Analogue input	
Analogue inputs	2
Modes	Voltage or current
Voltage level	0 V to +10 V (scaleable)
Current level	0/4 to 20 mA (scaleable)
Analogue output (can be used as digital output)	
Programmable analogue outputs	2
Current range at analogue output	0/4–20 mA
Relay outputs	
Programmable relay outputs	2 (240 VAC, 2 A and 400 VAC, 2 A)
Fieldbus communication	
Standard built-in: FC Protocol N2 Metasys	FLN Apogee Modbus RTU BACnet mstp

Dimensions

MAXIMUM DIMENSIONS and WEIGHTS							
Frame Size	Power Range – HP (kW)			Enclosure – Inches (mm)			Max Weight Lbs (Kg)
	200V - 240V	380V - 480V	525V - 600V	Height	Width	Depth	
H1	1/3 (0.25) - 2 (1.5)	0.5 (0.37) - 2 (1.5)	—	7.7 (195)	3.0 (75)	6.6 (168)	4.6 (2.1)
H2	3 (2.2)	3 (2.2) - 5 (4.0)	—	8.9 (227)	3.5 (90)	7.5 (190)	7.5 (3.4)
H3	5 (3.7)	7.5 (5.5) - 10 (7.5)	—	10.0 (255)	3.9 (100)	8.1 (206)	9.9 (4.5)
H4	7.5 (5.5) - 10 (7.5)	15 (11) - 20 (15)	—	11.7 (296)	5.3 (135)	9.5 (241)	17.4 (7.9)
H5	15 (11)	25 (18.5) - 30 (22)	—	13.1 (334)	5.9 (150)	10.0 (255)	20.9 (9.5)
H6	20 (15) - 25 (18.5)	40 (30) - 60 (45)	30 (22) - 40 (30)	20.4 (518)	9.4 (239)	9.5 (242)	54.0 (24.5)
H7	30 (22) - 40 (30)	75 (55) - 100 (75)	60 (45) - 75 (55)	21.7 (550)	12.3 (313)	13.2 (335)	79.4 (36)
H8	50 (37) - 60 (45)	125 (90)	100 (75) - 125 (90)	26.0 (660)	14.8 (375)	13.2 (335)	112.4 (51)
H9	—	—	3 (2.2) - 10 (7.5)	10.6 (269)	5.1 (130)	8.1 (205)	14.6 (6.6)
H10	—	—	15 (11) - 20 (15)	15.7 (399)	6.5 (165)	9.8 (248)	26.5 (12)



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Taco Inc., 1160 Cranston Street. Cranston, RI 02920 / (401) 942-8000 / Fax (401) 942-2360
Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422 / Fax (905) 564-9436
www.taco-hvac.com