



SmartHVAC Control Panel

Heating Ventilation and Air Conditioning Solutions

Cooling Towers / Chiller Pump System / Air Handler Units / Wastewater Pumps / Domestic Water Booster System / Irrigation Water Pumps / Oil Beam Pumps

FEATURES

- UL 508 complied Panel Design
- Closed-loop Fan Cooled Cabinet
- Standard Sequencing Pressure, Flow and Motor Speed
- Power Restore Mode Sequence
- VFD Parameters Control via Network
- Precision induction motor controls through internal PID capabilities
- Bypass Hand/OFF/Auto switch
- Motor Overload protection by circuit breakers

BENEFITS

- Ease of use: Three Cables In, Three Cables Out
- Energy efficient VFD controls lower energy cost
- Integration with existing Building Automation System via standard BACnet and Modbus protocols
- Multi Sequence of Operation Application Available
- Reduces stress and expands life cycle motor
- Interlocks damper control, to ensuring preventing damage to duct work
- Internal mounted VFD options: 15 HP, 20 HP, 25 HP, 30 HP, 40 HP or 50 HP



VFD Control Panel Model #		DCPV-1550-15	DCPV-1550-20	DCPV-1550-25	DCPV-1550-30	DCPV-1550-40	DCPV-1550-50
Power		15HP / 11kW	20HP / 15kW	25HP / 18.5kW	30HP / 22kW	40HP / 30kW	50HP / 37kW
Voltage		3 Phase 480 VAC	3 Phase 480 VAC	3 Phase 480 VAC	3 Phase 480 VAC	3 Phase 480 VAC	3 Phase 480 VAC
Variable Speed Drive		Delta CP2000 Series	Delta CP2000 Series	Delta CP2000 Series	Delta CP2000 Series	Delta CP2000 Series	Delta CP2000 Series
Disconnect Switch		40 Amps	60 Amps	100 Amps	100 Amps	100 Amps	100 Amps
Main Controller		CP2000 VFD Drive built-in PLC Controller					
Output Rating	Light Duty						
	Rated Output Capacity (kVA)	18	24	29	36	45	57
	Rated Output Current (A)	22.5	30	36	45	56	72
	Applicable Motor Output (kW)	11	15	18.5	22	30	37
	Applicable Motor Output (HP)	15	20	25	30	40	50
Overload Tolerance		120% of rated current for 1 minute					
Output Frequency (Hz)		0-600Hz					
Normal Duty	Rated Output Capacity (kVA)	14	19	25	30	36	48
	Rated Output Current (kVA)	18	24	32	38	45	60
	Applicable Motor Output (kW)	7.5	11	15	18.5	22	30
	Applicable Motor Output (HP)	10	15	20	25	30	40
	Overload Tolerance		120% of rated current for 1 minute : 160% of rate for 3 seconds				
Output Frequency (Hz)		0-600Hz					
Input Rating	Input Current (A) Light Duty	25	33	39	47	58	76
	Input Current (A) Normal Duty	20	26	35	40	47	63
	Rated Voltage Frequency	3-Phase AC - 380V~480V (-15%~+10%), 50/60Hz					
	Operating Voltage Range	323~528Vac					
	Frequency Tolerance	47~63Hz					
	Braking Chopper	Built-in					
	EMI Filter	Built-in					
Communication Protocols							
BACnet MS/TP RS-485		BACnet Slave mode MS/TP RS-485					
Modbus RS-485		Standard Modbus Slave mode RS-485					
Control Inputs & Outputs Signal							
Analog Inputs		Channel 1: Temperature Sensor use as Thermal Management Channel 2 and Channel 3 : Standard Signal Signal (12 bits 0-10v or 4-20mA)					
Digital Input		Four Channels Digital Inputs (Dry contacts)					
Analog Output		Channel 1 Analog Output (0 -10 vdc or 0 - 20mA) Channel 2 Analog Output (0 - 10 vdc or 4-20mA)					
Operating Environment							
Ambient Operating Temperature		10°F - 122°F (10°C - 50°C)					
Rated Humidity		Operating: 0-90% RH, noncondensing, no dripping water Storage/Transportation: 0-90% RH					
Air Pressure		Operating /Storage: 86 to 106 kPa Transportation: 70-106 kPa					
Altitude		AC motor drive installed altitude 0-1000m, follow normal operation restriction If it is installation at altitude 1000-3000m, decrease 2% of rate current or lower 0.5 at temperature for every 100m increase altitude Maximum altitude for Corner Grounded is 2000m					
Vibration		1.0mm, peak to peak value range from 2Hz to 13.2Hz: 0.7G-1.0G range from 13.2Hz to 55Hz 1.0G range from 55Hz to 512Hz. Complies with IEC 60068-2-6					
Impact		IEC/EN 60068-2-27					
Panel Indicator Lights							
Power Status RED Indicator		Light Type: LED Panel Label: POWER ON/OFF					
System Status GREEN Indicator		Light Type: LED Panel Label: SYSTEM RUN					
System Alarm Status ORANGE Indicator		Light Type: LED Panel Label: SYSTEM ALARM					
Bypass Switch Hand/Off/Auto (H.O.A)		Panel Label: HAND-OFF-AUTO					
Enclosure							
Type		NEMA 3R					
Mounting		Wall Mount					
Color		RAL 7035 (light gray)					
Cooling		Fan Cooling: 120 VA 228 CFM, 3400 RPM, 58dB					
Dimensions HxWxD (mm)		30"x24"x12" (762x610x305mm)					
Weight (kgs)		175 lb (80 kg)			196.6 lb (91.9 kg)		
Certification		Meets UL 508 Specification					

Product specifications subject to change without notice.

