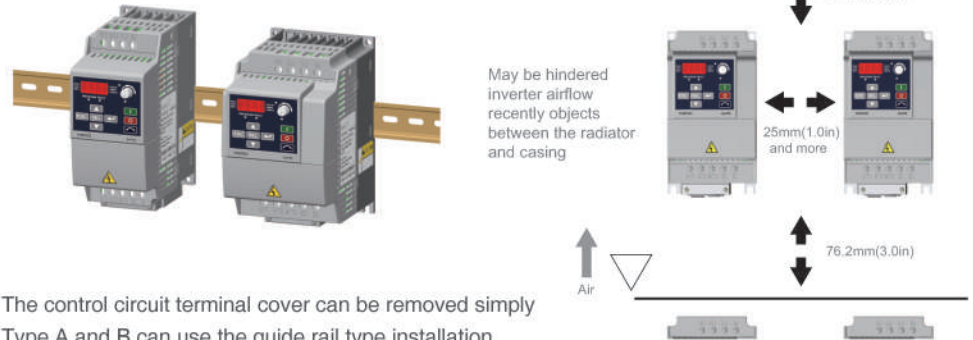


EvVFE Series Miniature Frequency Inverter

Product Introduction

EvVFE Miniature inverter with high stability, high reliability. use V/F control mode, provide excellent speed control and high levels of torque control in the whole speed range, even if the dramatic increase in load, also can improve the speed regulation effect. An built-in EMC filter is an optional part.

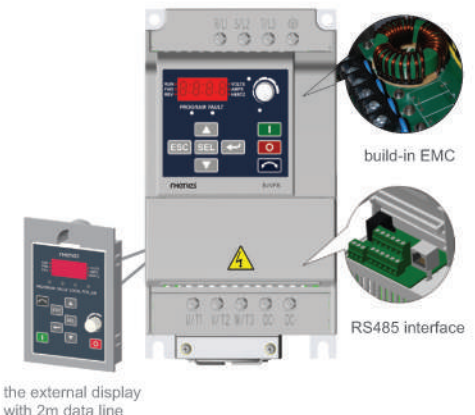
Packaging and Mounting



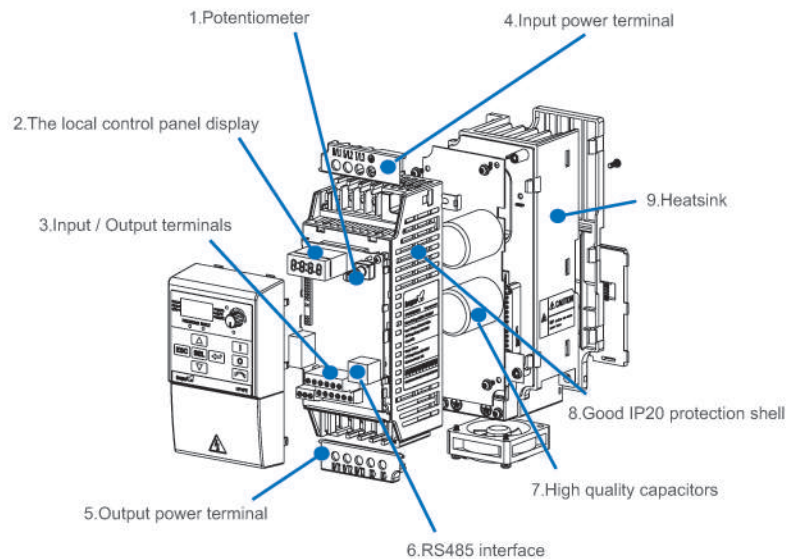
- ◆ The control circuit terminal cover can be removed simply
- ◆ Type A and B can use the guide rail type installation
- ◆ All the single 220 V and 380 V three-phase inverter built-in EMC filter
- ◆ Zero clearance installation allows ambient temperature as high as 40 degrees, and save the precious installation space. Under the condition of the guarantee minimum frequency converter installation clearance, ambient temperature can reach 50 degrees.

Optimized Performance

- ◆ Control method: V/F control
- ◆ Operate simply, powerful
- ◆ Inverter automatic compensation and slip compensation for IR
- ◆ The PWM frequency can be adjusted to 10 KHZ guarantees the quiet operation
- ◆ Using the MODBUS communication protocol, RS485 interface
- ◆ Built-in EMI filter(optional)
- ◆ The external display
- ◆ 150% for 60 s, 200% for 3 s



Product Structure



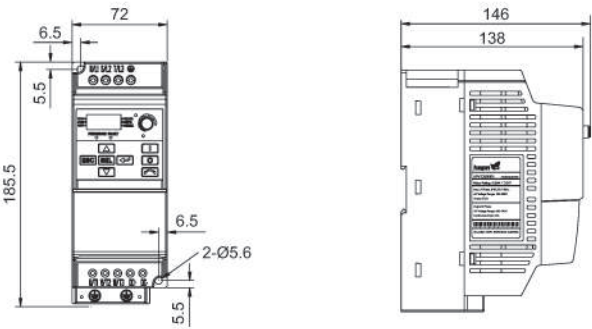
Product Selection

Voltage	Model	Power (kW)	Horse Power (HP)	Rated Current (A)	Inverter Specification	Inverter Dimension	Weight (kg)
200~240Vac ± 10% 50/60Hz Single	EvVFE02S0D75	0.75	1	4.2	A	72×185.5×146	1.3
	EvVFE02S1D5	1.5	2	8	B	100×174×146.5	1.8
	EvVFE02S2D2	2.2	3	11			
200~240Vac ± 10% 50/60Hz Built-in EMC filter Single	EvVFE02S0D7501	0.75	1	4.2	A	72×185.5×146	1.3
	EvVFE02S1D501	1.5	2	8	B	100×174×146.5	1.8
	EvVFE02S2D201	2.2	3	11			
200~240Vac ± 10% 50/60Hz Triple	EvVFE02T0D75	0.75	1	4.2	A	72×185.5×146	1.3
	EvVFE02T1D5	1.5	2	8	B	100×174×146.5	1.8
	EvVFE02T2D2	2.2	3	12			
	EvVFE02T3D7	3.7	5	17.5			
	EvVFE02T5D5	5.5	7.5	25	C	130×258×189.8	4
	EvVFE02T7D5	7.5	10	33			
380~460Vac ± 10% 50/60Hz Triple	EvVFE04T0D75	0.75	1	2.5	A	72×185.5×146	1.3
	EvVFE04T1D5	1.5	2	4.2			
	EvVFE04T2D2	2.2	3	6	B	100×174×146.5	1.8
	EvVFE04T3D7	3.7	5	8.7			
	EvVFE04T5D5	5.5	7.5	13	C	130×258×189.8	4
	EvVFE04T7D5	7.5	10	18			
	EvVFE04T11	11	15	24			
380~460Vac 10% 50/60Hz Triple Built-in EMC filter	EvVFE04T0D7501	0.75	1	2.5	A	72×185.5×146	1.3
	EvVFE04T1D501	1.5	2	4.2			
	EvVFE04T2D201	2.2	3	6	B	100×174×146.5	1.8
	EvVFE04T3D701	3.7	5	8.7			
	EvVFE04T5D501	5.5	7.5	13	C	130×258×189.8	4
	EvVFE04T7 D501	7.5	10	18			
	EvVFE04T1101	11	15	24			

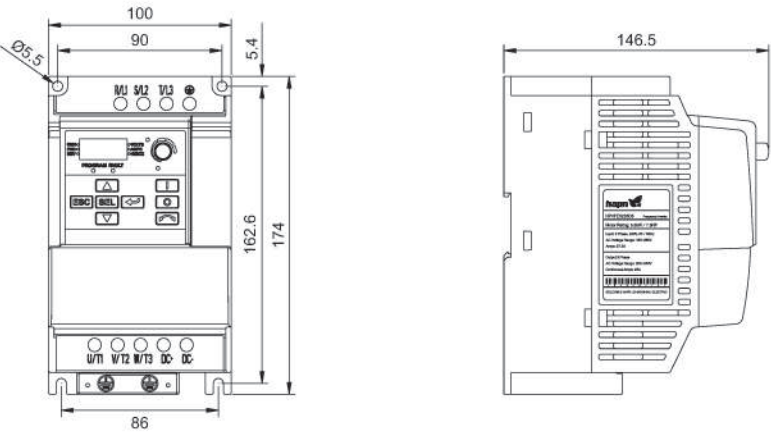
EvVFE Series
Miniature Frequency Inverter

Product Dimension

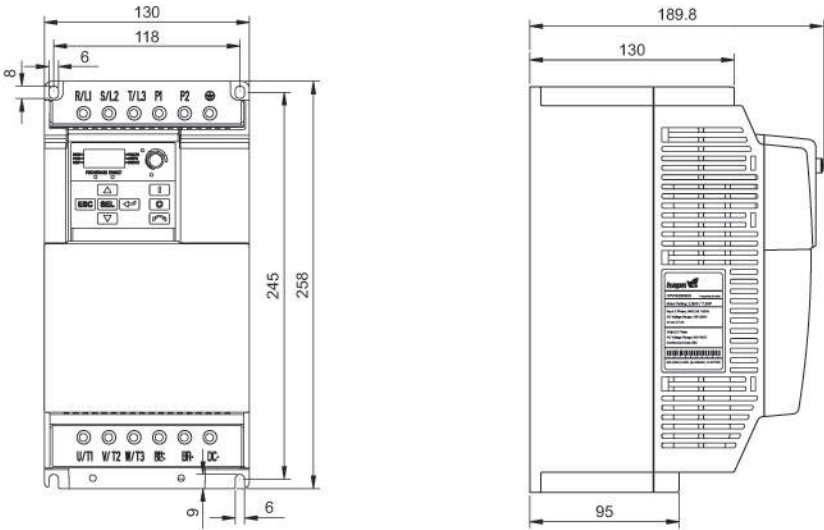
A Series



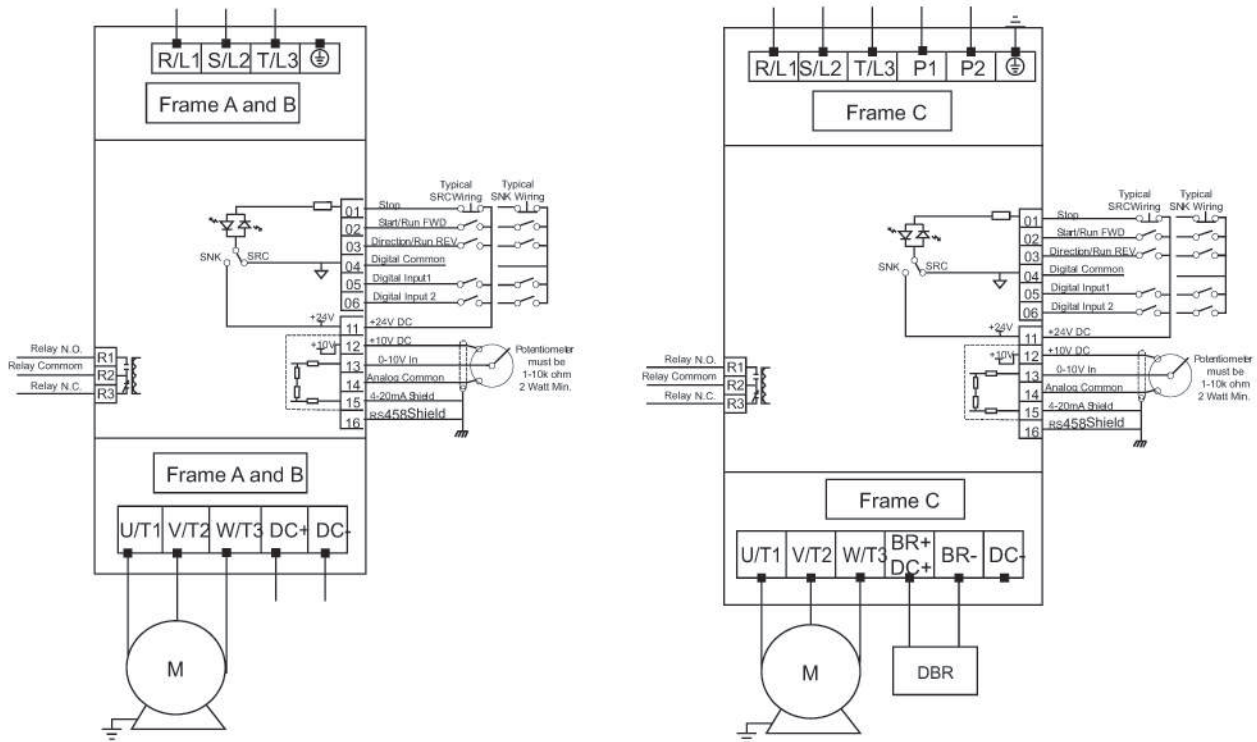
B Series



C Series



Wiring Diagram



Terminals		
R/L1,S/L2	Single phase input	
R/L1,S/L2,T/L3	Three phase input	
P1 ⁽²⁾ ,P2 ⁽²⁾	The Frame C drive is shipped with a jumper between Terminals P1and P2. Remove this jumper only when a DC Bus Inductor will be connected. Drive will not power up without a jumper or inductor connected.	
U/T1	To motor terminals U/T1	Exchange the motor connector to convert the rotation direction
V/T2	To motor terminals V/T2	
W/T3	To motor terminals W/T3	
DC+ ⁽²⁾ ,DC- ⁽²⁾	DC bus line terminals	
BR+ ⁽²⁾ ,BR- ⁽²⁾	Brake resistor terminals	
⊕	Earthing terminals	

EvVFE Series

Miniature Frequency Inverter

Inverter Technology Data

Specification		
Input/Output Ratings	Output frequency: 0~400Hz(programmable)	
	Efficiency: 97.5% (typical)	
Digital Control Inputs (Input Current =6mA)	SRC (Source) Mode	18-24V=on
		0-6V=off
	SNK (Sink) Mode	0-6V=on
		18-24V=off
Analog Control Inputs	4-20mA Analog	250 ohm input impedance
	0-10V DC Analog	100k ohm input impedance
	External Pot	1-10k ohms, 2 Watt minimum
Control Output (Programmable Output, form C relay)	Resistive Rating	3.0A at 30V DC, 125vAC and 240VAC
	Inductive Rating	0.5A at 30V DC, 125vAC, and 240VAC
Protective Features	I ² t overload protection - 150% for 60 Secs, 200% for 3 Secs (Provides Class 10 protection)	
Over Volatge	200-240VAC input	
	380-460VAC input	
Under Volatge	200-240VAC input Input	Tripoccurs at 210V DC bus voltage (equivalent to 150V AC incoming line)
	380-460 VAC input	Tripoccurs at 390V DC bus voltage (equivalent to 275V AC incoming line)
Control Ride Through		
Dynamic braking	Faultless Power Ride Through: 100 milliseconds	
	3-phase 220V, 5.5kW 7.5kW inverter and 3-phase 380V 5.5kW 7.5kW 11kW inverter have built-in brake unit in IGBT	

Specification		
Environment	Allowed max sea level	1000m(3300feet), no need for derating use
	Allowed max environment temperature	IP20 open install
	Cooling method	Without fan
		With fan
	Storage temperature	220V three phase 0.75kw 380V three phase 0.75kw All other power range except 0.75kw
	Working condition	-40℃ -85℃
	Relative humidity	The inverter may not be installed in explosive, corrosive, steam or dusty working condition.
	Impact (operation)	0~95%, No condensation
	Vibration (operation)	15G peak value for 11ms(0.1ms) 1G peak value 5~2000Hz
Control	Carrier Frequency	2-10kHz . Driver rating based on 4 kHz
	Frequency accuracy	Digital Input
		Analog Input
	Speed Regulation Open Loopwith Slip Compensation	Within ±0.05% of set output frequency Within 0.5% of maximum output frequency
	Stop Modes	±2% of base speed across a 40:1 speed range
	Acceleration/Deceleration	Multiple programmable stop modes including -Ramp, Coast, DC-Brake Ramp-to-Hold
	Intermittent Overload	Two independently programmable acceleration and deceleration times Each time may be programmed from 0~600 seconds in 0.1 second increments
	Electrical overload protection	150% Overload capability for up to 1 minute , 200% Overload capability for up to 3 seconds
		Level 10, quick response and overload holding protection
Electric	Voltage range	200-240V ±10%
		380-460V ±10%
	Frequency range	50/60Hz
	Input	For 3-phase, the input supports full rated current.
		For 1-phase, input supports 35% rated current