

Yolico



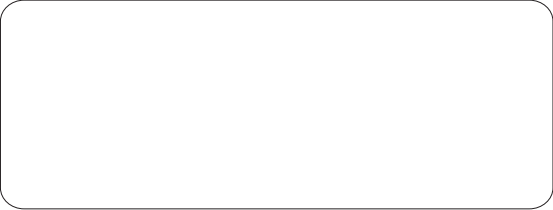
Yolico

YD280 Series
for general purpose



***Detailed Work Makes Quality
Our Quality Equals Perfection***

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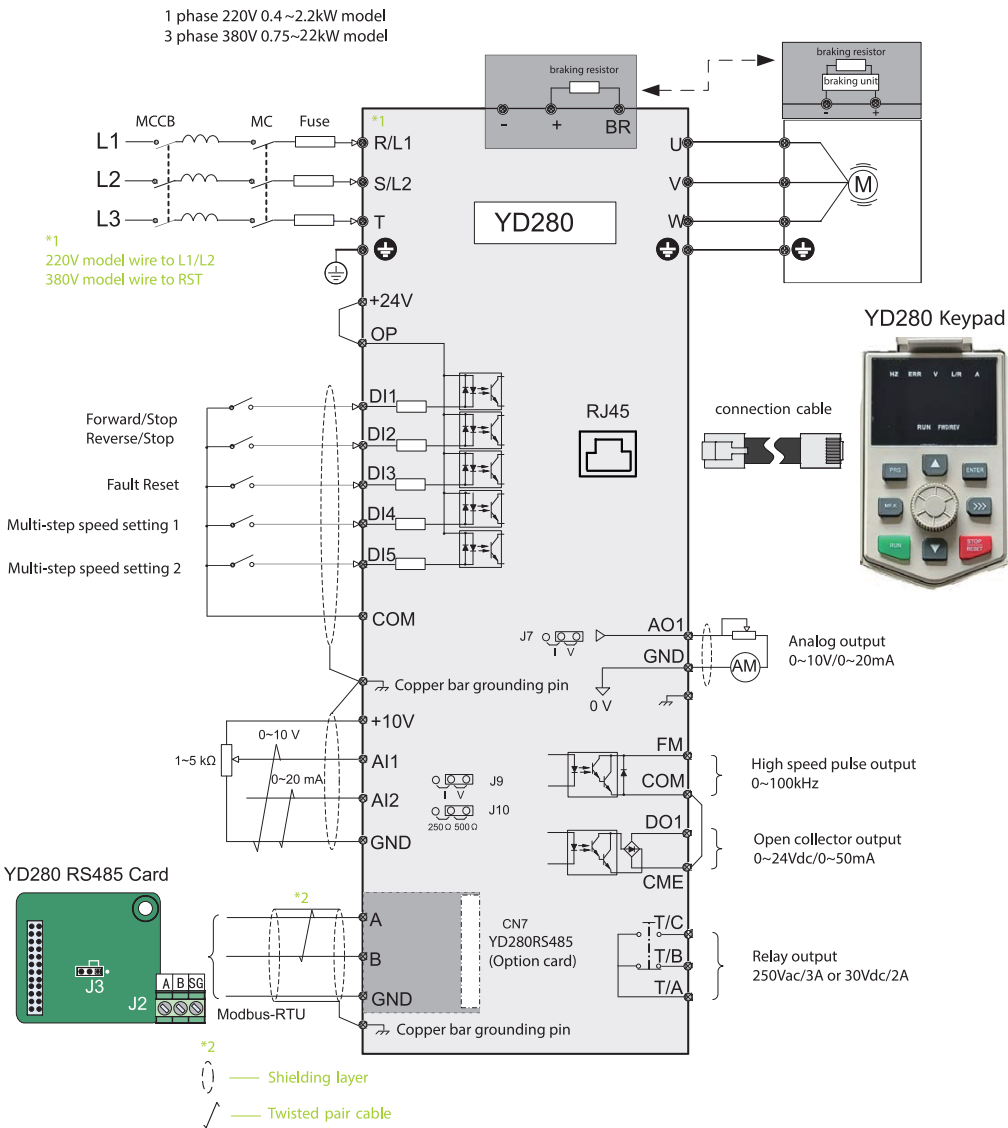


YD280 Description

Product Features

- *The overload curve supports G type and P type
- *The whole series supports DC braking function / *It can be started by Load Flying
- *Support voltage instantaneous stop, power failure non-stop
- *Load jamming, overload, short circuit protection
- *Built-in simple PLC programe control / *Built-in fan pump special PID control
- *Speed search load speed and direction / *Provide multiple virtual contact functions
- *Support master and slave parallel transmission control
- *PID control provides intelligent sleep wake-up function
- *Provide 2 sets of motor parameter switching function
- *Equipped with a panel knob for a given frequency
- *Communication bus RS485 (optional) / *Provide password lock and timing function

Connections



Model Number / Technical Data

YD : Yolico Inverter	Load type & motor ratings	Braking Transistor
280 : Series T2S : 200~240V 1 Phase T4 : 380~480V 3 Phase	G : general purpose 0P4 : 0.4kW 1P5 : 1.5kW ⋮ 22 : 22kW P : fan & pump purpose 0P7 : 0.75kW 1P5 : 1.5kW ⋮ 22 : 22kW	B : Built-in

1-phase 200 to 240V

Models	Type	Power capacity kVA	Input Current (A)	Output Current (A)	Applicable motor		Frame size
					kW	HP	
1-phase 200 to 240V, -15% to +10%, 50/60Hz							
YD280T2S-0P4GB	G	1.4	5.4	2.3	0.4	0.5	F1
YD280T2S-0P7GB	G	2.2	8.0	3.8	0.75	1	
YD280T2S-1P5GB	G	3.7	15.0	7.2	1.5	2	
YD280T2S-2P2GB	G	6.0	22.8	9.0	2.2	3	

3-phase 380 to 480V

Models	Type	Power capacity kVA	Input Current (A)	Output Current (A)	Applicable motor		Frame size
					kW	HP	
3-phase 380 to 480V, -15% to +10%, 50/60Hz							
YD280T4-0P7G/1P5PB	G	2.8	2.4	2.1	0.75	1	F1
	P	5.0	4.6	3.8	1.5	2	
YD280T4-1P5G/2P2PB	G	5.0	4.6	3.8	1.5	2	
	P	6.7	6.3	5.1	2.2	3	
YD280T4-2P2G/3P0PB	G	6.7	6.3	5.1	2.2	3	
	P	9.5	9.0	7.2	3	4	
YD280T4-3P0G/3P7PB	G	9.5	9.0	7.2	3	4	
	P	12.0	11.4	9.0	3.7	5	
YD280T4-3P7G/5P5PB	G	12.0	11.4	9.0	3.7	5	
	P	17.5	16.7	13.0	5.5	7.5	
YD280T4-5P5G/7P5PB	G	17.5	16.7	13.0	5.5	7.5	F2
	P	22.8	21.9	17.0	7.5	10	
YD280T4-7P5GB	G	22.8	21.9	17.0	7.5	10	
YD280T4-11G/15PB	G	33.4	32.2	25.0	11	15	F3
	P	42.8	41.3	32.0	15	20	
YD280T4-15G/18P5PB	G	42.8	41.3	32.0	15	20	
	P	45.0	49.5	37.0	18.5	25	
YD280T4-18P5G/22PB	G	45.0	49.5	37.0	18.5	25	F4
	P	54.0	59.0	45.0	22	30	
YD280T4-22GB	G	54.0	59.0	45.0	22	30	

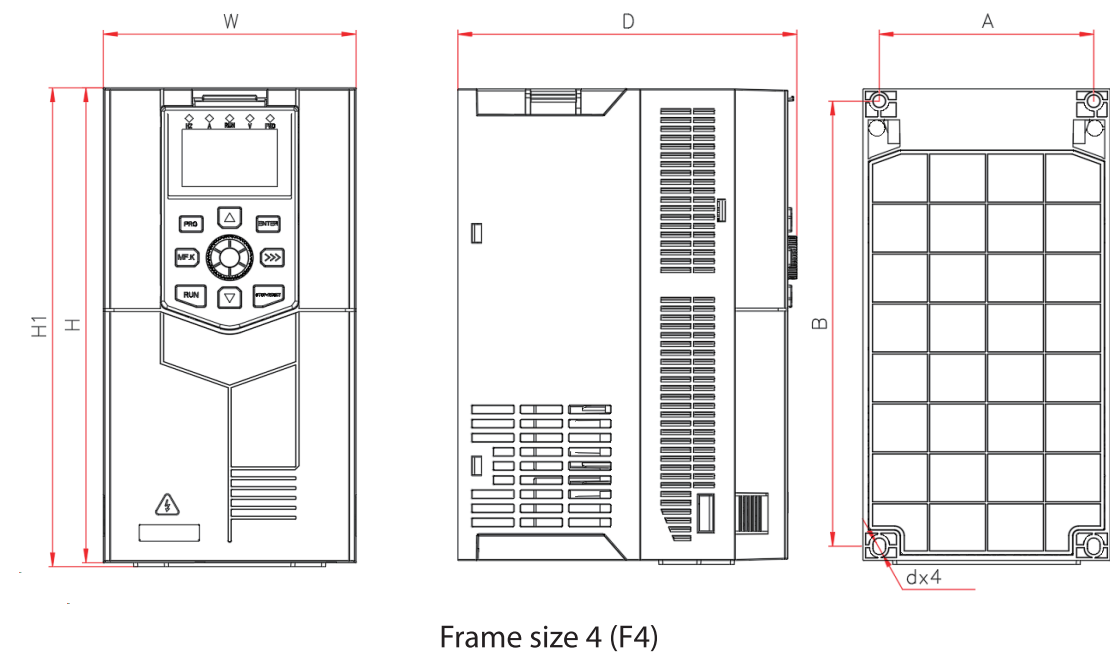
Technical drawings of the HMI for Frame size 1 (F1) and Frame size 2 (F2). The drawings show the front and side views of the device, with dimensions labeled in millimeters (mm).

Frame size 1 (F1):

- Front view: Dimensions include W (width), A (display width), H (height), B (display height), and dx4 (mounting hole distance).
- Side view: Dimensions include D (depth).

Frame size 2 (F2):

- Front view: Dimensions include W (width), H1 (height), and H (total height).
- Side view: Dimensions include D (depth).
- Top view: Dimensions include A (width), B (height), and dx4 (mounting hole distance).



Frame size	Models	Mounting Holes (mm)		Dimensions (mm)				Mounting Holes (mm)	Weight Kg
		A	B	H	H1	W	D		
F1	YD280T4-0P7G/1P5PB	74	187	197.5	-	90	141	Ø5	1.6
	YD280T4-1P5G/2P2PB								
	YD280T4-2P2G/3P0PB								
	YD280T4-3P0G/3P7PB								
	YD280T4-3P7G/5P5PB								
F2	YD280T4-5P5G/7P5PB	90	190	200	202	102	163.5	Ø6	1.8
	YD280T4-7P5GB								
F3	YD280T4-11G/15PB	108.5	227	240.5	242.5	125	173	Ø6.5	2.0
	YD280T4-15G/18P5PB								
F4	YD280T4-18P5G/22PB	147	278.5	295	297	165	208.3	Ø7	2.4
	YD280T4-22GB								

Frame size	Models	Mounting Holes (mm)		Dimensions (mm)				Mounting Holes (mm)	Weight Kg
		A	B	H	H1	W	D		
F1	YD280T2S-0P4GB	74	187	197.5	-	90	141	Ø5	1.6
	YD280T2S-0P7GB								
	YD280T2S-1P5GB								
	YD280T2S-2P2GB								

Technical Data

Description		
Standard functions	Input frequency resolution	Digital setting : 0.01 Hz Analog setting : Max. frequency x 0.025%
	Control mode	Sensorless vector control (SVC) Voltage/Frequency (V/F) control *T2S model supports V/F only
	Startup torque	0.25Hz/150% (SVC)
	Speed range	1 : 200 (SVC)
	Speed stability accuracy	±0.5% (SVC)
	Torque control accuracy	SVC : 5Hz above ± 5%
	Torque boost	Customized boost 0.1% to 30.0%
	Output Frequency	0 ~ 500Hz
	V/F curve	Straight-line ; Multi-point ; Square ; Complete and Half V/F separation
	Ramp mode	Straight-line ramp , S-curve ramp. Four separate acceleration/deceleration time settings in the range of 0s to 6500s
	DC injection braking	DC injection braking frequency : 0 Hz to max. frequency DC injection braking active time : 0.0s to 36.0s Current level of DC injection braking : 0% to 100%
	Jog running	Frequency range of jog running : 0.00 to 50.00 Hz Acceleration/Deceleration time of jog running : 0.0s to 6500.0s
	Onboard multiple preset speeds	The system implements up to 16 speeds by using simple PLC function or by using digital input signals
	Onboard PID	The system implements the proportionalegral-derivative (PID) function in the closed-loop control
	Automatic voltage regulation (AVR)	The system maintains a constant output voltage automatically when grid voltage changes through the permissible range
	Overvoltage and overcurrent stall control	The system limits the output current and voltage automatically during operation to prevent frequent or excessive trips
	Fast current limiting function	Minimize overcurrent fault and protect the normal operation of the inverter
	Torque limit and control	The system limits the torque automatically to prevent frequent overcurrent tripping during operation. Torque control is applied in vector control
Individualized functions	Power dip ride-through	Load feedback energy compensates for any voltage reduction, allowing the drive to continue to operate for a short time during power dips
	Overcurrent fast prevention	The function helps to avoid frequent overcurrent faults
	Virtual I/O	Five groups of virtual digital input/output (DI/DO)support simple logic control
	Timing control	Time range : 0.0 to 6500.0 minutes
	Dual-motor switchover	The drive have two groups of motor parameters and can control up to two motors
	Communication bus	RS485 Modbus-RTU

Technical Data

Description		
RUN	Command source	Panel, Terminal. Communication and switching between different commands
	Main frequency reference setting channel	Supports up to 10 frequency reference setting channels and allow different methods of switching between frequency reference setting channels:Digital setting, Analog, voltage reference, Analog current reference, Pulse reference, Communication reference
	Auxiliary frequency reference setting channel	Supports up to 10 auxiliary frequency sources
	Input terminals	Standard: Five digital input (DI) Two analog input (AI) terminals, one of which supports only 0 to 10V input, and the other supports 0 to 10V and 4 to 20mA current input
	Output terminals	Standard: Signal high-speed pulse output terminal (open-collector) for a square-wave Signal output in the frequency range 0 to 100kHz Signal digital output (DO) terminal Signal relay output terminal Signal analog output (AO) terminal that supports either a current output in the range 0 to 20mA or a voltage output in the range 0 to 10V
Display and operation panel	LED display	The 5-character LED display shows parameter values
	Key locking and function selection	Implement partial or full locking of keys, and define the scope of action of some keys to prevent misoperation
Protections	Phase loss protection	Input phase loss protection, Output phase loss protection
	Instantaneous overcurrent protection	Stop when 250% of rated output current is exceeded
	Overvoltage protection	Stop when DC bus voltage is above 410V/820V
	Undervoltage protection	Stop when DC bus voltage is below 170V/350V
	Overheat protection	Protection triggered when the AC Drive bridge gets overheated
	Overload protection	G type is running at 150% of rated current for 60s P type is running at 120% of rated current for 60s
	Overcurrent protection	Stop when 2.5 times of rated current of the AC Drive is exceeded
	Braking protection	Braking unit overload protection Braking resistor short-circuit protection
	Short-circuit protection	Output phase to phase short-circuit protection Output phase to ground short-circuit protection
Environment	Installation location	Install the AC Drive where it is indoors and protected from direct sunlight, dust, corrosive or combustible gases, oil smoke, vapour, ingress from water or any other liquid, and salt
	Altitude	There is no need to derate below 1000m, derating 1% for every 100m above 1000m, and please contact the manufacturer for more than 3000m
	Operation temperature	-10°C~+40°C, the temperature over 40°C needs to be de-rated, the ambient temperature is de-rated by 1.5% for every 1°C increase, and the maximum ambient temperature is 50°C
	Humidity	Less than 95% RH non-condensing
	Vibration	Less than 5.9 m/ s ² (0.6 g)
	Storage temperature	-20°C ~ +60°C