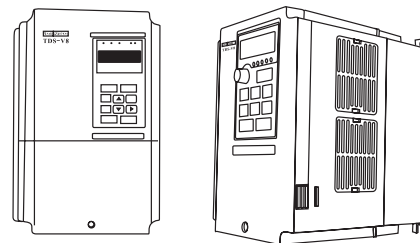


Tek

AC MOTOR Drive

TDS-V8 Series

(Sensorless Vector Control)



Feature

- ◆ **Sensorless Vector control with auto tuning system.**
-The Autotune feature can be used to identify and store the important motor parameters for the sensorless Vector Control Mode.
- ◆ **Standard LED operator.**
-Dialogic LCD operator (English/Chinese) with the function of parameters copying is optional.
- ◆ **Communication function:RS-485 installed (MODBUS protocol).**
- ◆ **Frequency control ranges from 0.1 Hz to 400Hz with resolution of 0.01Hz.**
-frequency setting signal DC:0~10V / 4~20mA
- ◆ **Two set of analogical output interface. which could be set as 11 individual analogical signals.**
- ◆ **PID Control, Simple PLC function, Energy saving, Multiple Frequency Pulse Output.**
- ◆ **Auto torque boost, slip compensation.**



TDS-V8 Specification

Input Voltage class		220V Class 3-Phase														
Model		0P7	1P5	2P2	3P7	5P5	7P5	011	015	018	022	030	037	045	055	075
Max Applicable Motor HP		1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100
(CT)* kW		0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
Output Power	Rated Out Capacity (kVA)	2	2.7	4	7.5	10.1	13.7	20.6	27.4	34	41	54	68	78	95	128
	Rate Output Current (A)*	4.8	6.4	9.6	17.5	24	32	48	64	80	96	130	160	183	224	300
	Max. Output Voltage (V)	3-Phase 200V ~ 230V AC (Proportional input voltage)														
Max. Frequency (Hz)		Through parameter setting (Max. 400Hz)														
Power Source		3 Phase 200V ~ 230V 50/60 Hz														
	Allowable Voltage Fluctuation	-15% ~ +10%														
	Allowable Frequency Fluctuation	±5%														
Medchemical Consturction		Enclosed,Wall-Mounted Type (NEMA-1) IP20												IP00		
	Cooling	Self		Forced												
Approx mass (kg)		2.2		2.8		5.5		13.1		24.5		47		69		73

Input Voltage class		440V Class 3-Phase																		
Model		0P7	1P5	2P2	3P7	5P5	7P5	011	015	018	022	030	037	045	055	075	090	110	132	160
Max Applicable Motor HP		1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125	150	175	215
(CT)* kW		0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160
	Rated Out Capacity (kVA)	2.1	2.7	4	7.5	10.1	13.7	20.6	27.4	34	41	54	68	82	110	138	180	195	210	260
	Rate Output Current (A)*	2.6	4.0	4.8	8	12	16	24	32	40	48	64	80	96	128	165	192	224	270	300
	Max. Output Voltage (V)	3-Phase 380V ~ 460V AC (Proportional input voltage)																		
Max. Frequency (Hz)		Through parameter setting (Max. 400Hz)																		
Rated Voltage Frequency		3 Phase 380V ~ 460V 50/60 Hz																		
Allowable Voltage Fluctuation		-15% ~ +10%																		
Allowable Frequency Fluctuation		±5%																		
Medchemical Consturction		Enclosed,Wall-Mounted Type (NEMA-1) IP20												IP00						
	Cooling	Self			Forced															
Approx mass (kg)		2.2		2.8		5.5		13.1		24.5		24.5		50		69		73		

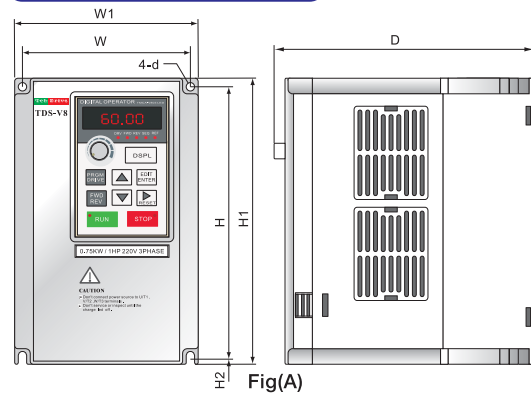
Control Characteristics & Protection Function

Operation Mode	LED operator or LCD operator
Control Mode	Sine PWM
Frequency Control Ranges	0.1Hz~400Hz
Frequency Accuracy	Digital Command:±0.01%(-10~+40°C), Analog Command:±0.1% (25°C~±10°C)
Frequency Command Resolution	Digital Command:0.01Hz, Analog Command:0.06Hz/60Hz
Frequency Output Resolution	0.01Hz
Overload Resistibility	150% Rated Current for 1 Minute (CT)
Frequency Setting Signal	DC 0~10V/4 ~ 20mA
Acc./Dec. Time	0.1~6000.0 Sec. (Accel/Decel Time Can be Set Independent)
Voltage-Frequency Characteristics	V/F Curve Can be Set Through Parameter Setting (15 Types Fixed, 1 Type Flexible)
Regeneration Torque	100%, 2%ED, 5 Seconds
Basic Control Function	Auto torque Boost, Slip Compensation, Restart After Momentary Power Loss, Energy Saving, PID Control, Simple PLC function, Sensorless Vector Control
Extra Function	Up/Down Operation, Cumulative Power on & Operation Hour Memory, 4 Different Sets of Fault Status Record(Including Latest one), RS-485 (MODBUS Protocol), Multiple-Pulse Output Port, 2 Analog Output Ports etc.

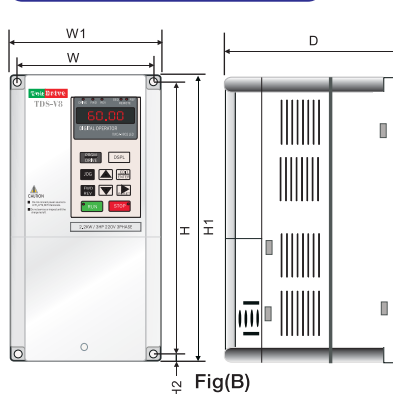
Stall Prevention	Current Level Can be Selected During Acceleration and Constant Speed Running. During Deceleration, Stall Prevention Can be Enabled or Disabled.
Instantaneous overcurrent (OC)	Stopped if above 200% Rated Current
Inverter Overload Protection (OL2)	Stopped if above 150% Rated Current for 1 Minute
Motor Overload Protection (OL1)	Electronic Overload Curve Protection
Overvoltage (OV)	Stop if VDC ≥ 410V(220 Class) or VDC ≥ 820V (440 Class)
Undervoltage (UV)	Stop if VDC ≤ 200V(220 Class) or VDC ≤ 400V (440 Class)
Momentary Power Loss Ride-Through time	≥ 15ms, stop otherwise
Overheat Protection (OH)	Protection by Thermistor
Grounding Protection (GF)	Protection by DC Current Sensor

Dimensions

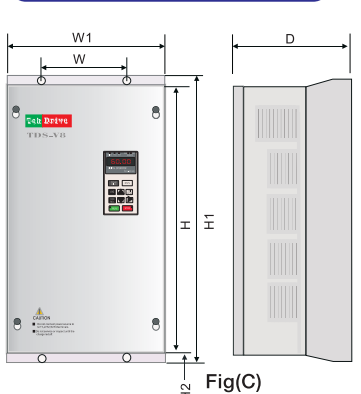
• (A)220/440V 3.7 KW and Below



• (B)220/440V 5.5 KW and 7.5KW



• (C)220/440V 11 KW and Above



Voltage	Application Motor	Mounting Dimension (mm)				External Dimension (mm)			Fig	
	Output(HP) / KW	W	H1	H2	d	W1	H1	D		
220V/ 440V	1HP / 0.75KW	108	173	5.5	5	118	184	168	Fig(A)	
	2HP / 1.5KW									
	3HP / 2.2KW									
	5HP / 3.7KW	124	214	5.5	6	137.5	225	161		
	7.5HP / 5.5KW									
	10HP / 7.5KW	174	281	8	8	191	297	197	Fig(B)	
	15HP / 11KW	140	394	8	8	244	410	202	Fig(C)	
	20HP / 15KW									
	25HP / 18.5KW									
	30HP / 22KW	170	479	12.5	10	287	504	273		
40HP / 30KW										
440V	50HP / 37KW									
60HP / 45KW										
220V	50HP / 37KW	250	709	12.5	12	376	734	280		
60HP / 45KW										
440V	75HP / 37KW									
100HP / 75KW										
440V	125HP / 90KW	430	843	13	15	533	870	280		
220V	75HP / 55KW									
100HP / 75KW										
440V	100HP / 110KW	430	843	13	15	533	870	280		
	175HP / 132KW									
	215HP / 160KW									

*Tek-Drive reserves the rights of changing the spec. For bigger capacity, please contact with PTLK International Ltd.

■ Description Inverter Model Number

TDS-V8-L OP7 E

TDS-V8

TekDrive Inverter series

Rated Voltage

L:220V, 60Hz(200V, 50Hz)

H:440V, 60Hz(400V, 50Hz)

Max. Applicable Motor Output(KW)

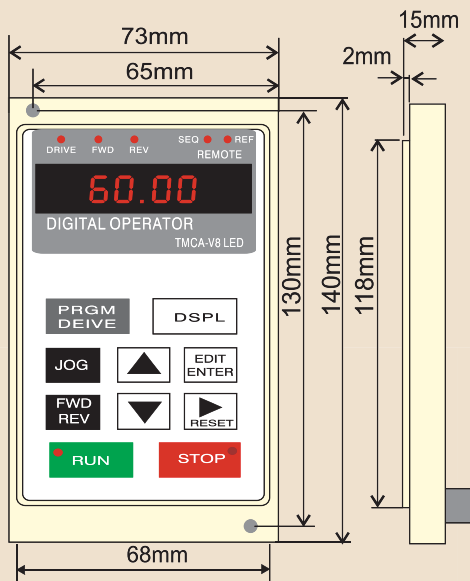
Operator Types

C:LCD operator

E:LED operator

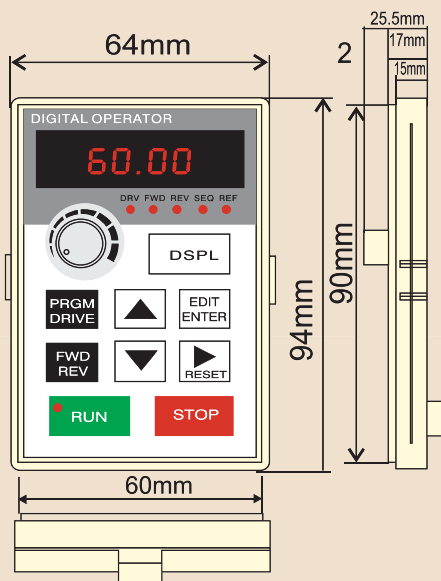
F:LED with VR

E:



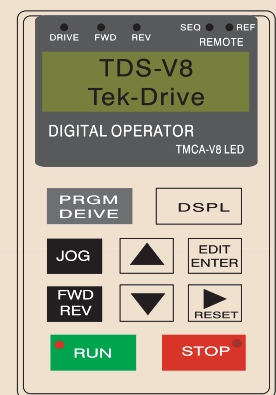
Standard for 5.5KW & above

F:



Standard for 3.7KW & below

C:



Optional LCD operator
The same size as
LED operator

■ Peripherals:

- Extension Cable Wire
- LCD Operator
- EMC Compliant Filter
- Braking Resistors
- Braking Unit

■ Wide Applications:

Textile (Wshers / Driers / Looms / Spinning / Carding / Warpers / Winders)

Waste water (Centrifugal Pumps / Booster Systems)

Plastic and Rubber (Extruders / Injection Molding Machines / Mixer / Calenders / Cut and Welding)

Mining and Cement (fans / Exhausts / Pumps / Screeners / Vibratory Feeders / Conveyors /....)

Chemical and Petrochemical (Compressors / Mixers / Process Pumps / Centrifuges /.....)

Pulp and Paper (Mertering Pumps / Process Pumps / Agitators / Mixers / Rotating Filter /.....)

Food (Metering / Process Pumps / Mixers / Conveyors..)

HVAC (Process Pumps / Fans / Exhausts / Air Conditioning...)

Steel (Rollout Tables / Winders / Unwinders / Lathes / Milling Cutters / Cutting /Wire Drawing /...)