

MARK: \_\_\_\_\_  
 PROJECT: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**Accessory Data Sheet**  
**Variable Frequency Drive**  
**Micro Drive**  
**IP20/NEMA 1**  
**YASKAWA V1000 Series**  
**Three Phase**

**STANDARD CONSTRUCTION FEATURES:**

Current vector control, open loop - RoHS compliance - Online tuning - Induction motor (IM) or permanent motor (PM) operation - Function Block Diagram (FBD) programming via DriveWorksEZ™ - Starting torque 200% at .5 Hz - Side by side installation - Removable terminal block with parameter backup function - "One-touch" copy function with verify - Super-fast 2 ms scan cycle with dual CPU - EN9541 Safety Cat. 3, Stop Cat. 0 - Vibration resistance, from 20 Hz to 50 Hz (0.65G) - Swing PWM function to decrease noise at low carrier frequencies - Pre-maintenance function - Modbus communication - Cooling fan replacement without tools - Short Circuit Current Rating (SCCR): 30kA rms symmetrical.

**SPECIFICATIONS:**

Input Range: 380-480± 10% VAC Three Phase / 48-62Hz  
 Output Ratings: Output Power 380-480V Three Phase 1/2-25 HP  
 Overload Capacity: 120% Overload for 60 sec.  
 Output Frequency: 0~400 Hz  
 Control Methods: Open Loop Current Vector Control, V/f Control, PM Open Loop Vector Control, Simple closed loop speed control

Protective Design: IP20/NEMA1  
 Braking Transistor: Standard in all models  
 Braking Torque: 20-40% increase with intelligent high slip braking function  
 KEB Function: Uses mechanical energy to continue operation during momentary power failure, standard

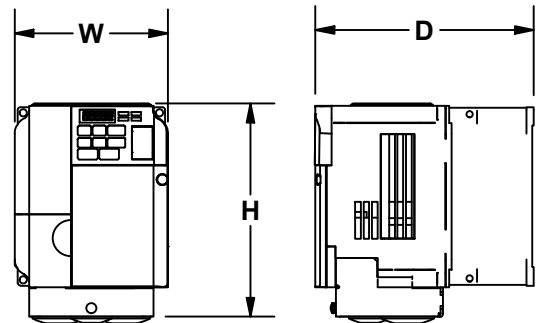
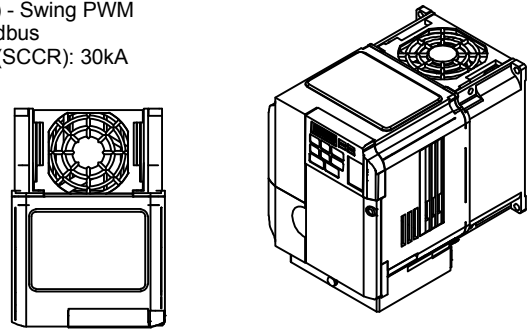
Overvoltage Function: Prevent function for die-cushion in a hydraulic mechanical press and other applications

Maintenance: Elapsed timer assists in preventative maintenance for cooling fan, capacitors, and transistors  
 Easily replaceable cooling fan

Global Certification: CE, UL, cUL, RoHS, TUV  
 Available I/O:  
 (7) multi-function digital inputs  
 (1) hardware baseblock  
 (2) multi-function analog inputs  
 (1) multi-function pulse input  
 (1) multi-function relay output  
 (2) multi-function photo-coupler outputs  
 (1) multi-function 0-10 Vdc analog output  
 (1) multi-function pulse output

Network Communication: Standard: RS-422/485 MODBUS 115 kbps  
 Optional: DeviceNet, EtherNet/IP, Profibus-DP, Modbus TCP/IP, MECHATROLINK-II

Keypad Operator: Standard LED 5 digit display  
 Optional multi-lingual, full-text remote LCD



Size VY1J15N1K shown.

**DIMENSION DATA**

Catalog No.	Voltage	HP	Output*	H	W	D	Wt.
VY1J10N1K	380-460	1/2	1.2	5.89	4.25	3.19	2.6
VY1J12N1K	380-460	1	2.1	5.89	4.25	3.90	3.1
VY1J14N1K	380-460	2	4.1	5.89	4.25	5.41	4.2
VY1J15N1K	380-460	3	5.4	5.89	4.25	6.06	4.2
VY1J16N1K	380-460	5	8.8	5.89	4.25	6.06	4.2
VY1J17N1K	380-460	7 1/2	11.1	6.02	5.51	5.63	5.7
VY1J18N1K	380-460	10	17.5	10.00	5.51	5.51	8.4
VY1J19N1K	380-460	15	23.0	10.00	5.51	5.51	8.4
VY1J20N1K	380-460	20	31.0	11.42	7.09	5.63	11.5
VY1J21N1K	380-460	25	38.0	11.42	7.09	6.42	12.1

ALL DIMENSIONS IN INCHES. WEIGHTS IN LBS.  
 \*RATED OUTPUT CURRENT (AMPS)