

DC3N Non-Regenerative DC Drives

PRICING

1/8 - 1.0 HP @ 115 VAC, 1-Ph, 50/60 Hz: 90 VDC Armature

1/4 - 2.0 HP @ 230 VAC, 1-Ph, 50/60 Hz: 180 VDC Armature

For the Operation of Permanent Magnet DC Motors Only



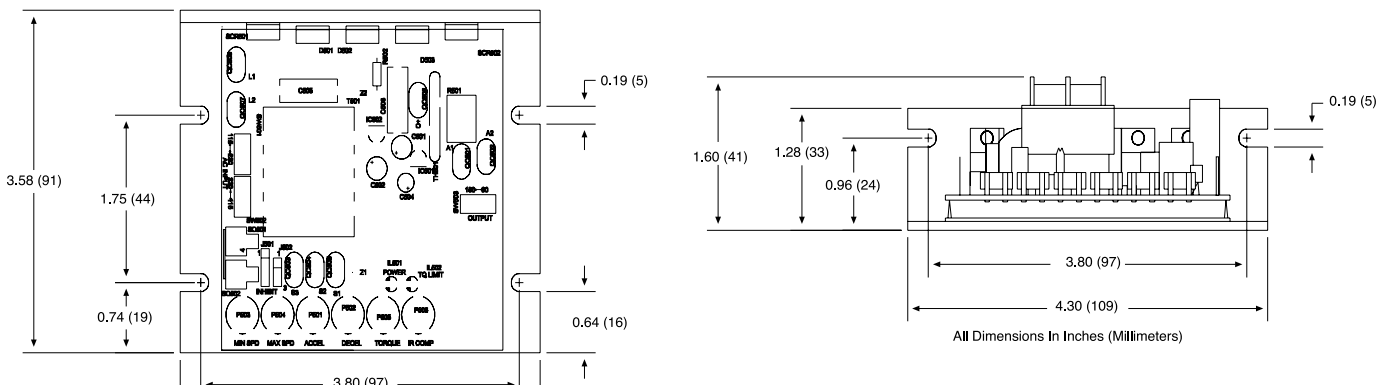
Product Features: DC3N Plate Model

- **Selectable input voltage:** 115 or 230 VAC
- **Dual armature voltage output switch selectable on all models:** 90 or 180 VDC
- **Control speed from:**
 - 10K ohm potentiometer included with drive
 - External isolated reference source⁽¹⁾
- **Speed regulation and range:**
 - 1.0% speed regulation armature voltage feedback
- **On-board LEDs for diagnostics:**
 - Power-ON indication
 - Current/torque limit indication
- **Inhibit circuit connection, for interfacing to external control logic, allows zero speed operation**
- **Independent potentiometer adjustments for:**
 - Minimum speed: 0-35%
 - Maximum speed: 75-100%
 - Acceleration: 0.5-17 sec.
 - Deceleration: 0.5-17 sec.
 - Torque limit: < 150%
 - IR compensation: 0-15%

HP - Rating		"Non-Isolated" Controller Selection - DC3N Chassis Model - 115/230 VAC, 1 Phase, 50/60 Hz						
115 VAC	230 VAC	Enclosure	Rated AC	Input	DC Armature	Rated Armature	Model Number	List
Input	Input	Type	Line (Amps)	KVA	Voltage	Current (Amps)		
1/8 to 1/2	--	Plate	4.5 to 7.8	0.5 to 0.9	90	2.7 to 5.0	* DC3N-12D-00-010-AN	\$70
1/2 to 1.0	--	Plate	7.8 to 13	0.9 to 1.5	90	* 5.0 to 10		
--	1/2 to 1.0	Plate	2.6 to 7.0	0.6 to 1.6	180	1.4 to 5.0		
--	1.0 to 2.0	Plate	7.0 to 12	1.6 to 2.8	180	* 5.0 to 9.2		

* Requires addition of Heatsink Kit Option: DC3N-HS-00 List Price: \$24.00

(1) 90 VDC Armature: 0-1.4 VDC reference and 180 VDC: 0-2.8 VDC reference



INSTRUCTION MANUAL

D2-3451

* Normally carried in stock

DISCOUNT VS-3DC

DC3N Non-Regenerative DC Drives

Introduction

PRICING

1/8 - 1.0 HP @ 115 VAC, 1-Ph, 50/60 Hz: 90 VDC Armature
1/4 - 2.0 HP @ 230 VAC, 1-Ph, 50/60 Hz: 180 VDC Armature
For the Operation of Permanent Magnet DC Motors Only



AC Drives

Product Features: DC3N Enclosed Models

- **Selectable input voltage:** 115 or 230 VAC
- **Fused AC line input connections:** L1 & L2
- **Dual armature voltage output switch selectable on all models:** 90 or 180 VDC
- **Control speed from:**
 - 10K ohm potentiometer included with drive
 - External isolated reference source⁽¹⁾
- **Speed regulation and range:**
 - 1.0% speed regulation armature voltage feedback
- **Door mounted operator devices:**
 - Power on/power off selector switch and power on indicator light
 - Speed potentiometer
- **On-board LEDs for diagnostics:**
 - Power-ON indication
 - Current/torque limit indication
- **Terminal block for customer use**
- **Inhibit circuit connection for interfacing to external control logic**
- **Independent potentiometer adjustments for:**
 - Minimum speed: 0-35%
 - Maximum speed: 75-100%
 - Acceleration: 0.5-17 sec.
 - Deceleration: 0.5-17 sec.
 - Torque limit: < 150%
 - IR compensation: 0-15%

Analog DC Drives

Digital DC Drives

HP Rating		"Non-Isolated" Controller Selection - DC3N Enclosed Models - 115/230 VAC, 1 Phase, 50/60 Hz						
115 VAC Input	230 VAC Input	Enclosure Type	Rated AC Line (Amps)	Input KVA	DC Armature Voltage	Rated Armature Current (Amps)	Model Number	List
1/8 to 1/2		NEMA 1	4.5 to 7.8	0.5 to 0.9	90	2.7 to 5.0		
1/2 to 1.0	--	NEMA 1	7.8 to 13	0.9 to 1.5	90	** 5.0 to 10	* DC3N-12D-01-010-AN	\$150
--	1/2 to 1.0	NEMA 1	2.6 to 7.0	0.6 to 1.6	180	1.4 to 5.0		
--	1.0 to 2.0	NEMA 1	7.0 to 12	1.6 to 2.8	180	** 5.0 to 9.2		
1/8 to 1/2	--	NEMA 4X/12	4.5 to 7.8	0.5 to 0.9	90	2.7 to 5.0		
1/2 to 1.0	--	NEMA 4X/12	7.8 to 13	0.9 to 1.5	90	5.0 to 10	* DC3N-12D-4X-010-AN	\$220
--	1/2 to 1.0	NEMA 4X/12	2.6 to 7.0	0.6 to 1.6	180	1.4 to 5.0		
--	1.0 to 2.0	NEMA 4X/12	7.0 to 12	1.6 to 2.8	180	5.0 to 9.2		

** Requires addition of Heatsink Kit Option: DC3N-HS-01 List Price: \$30.00

(1) 90 VDC Armature: 0-1.4 VDC reference and 180 VDC: 0-2.8 VDC reference

Options & Accessories

INSTRUCTION MANUAL

D2-3451

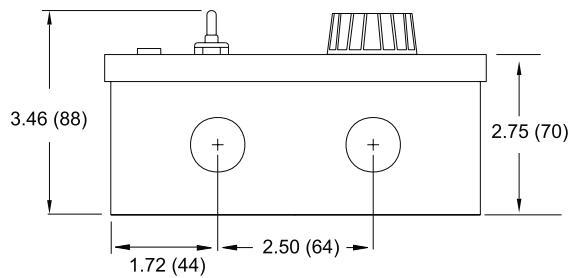
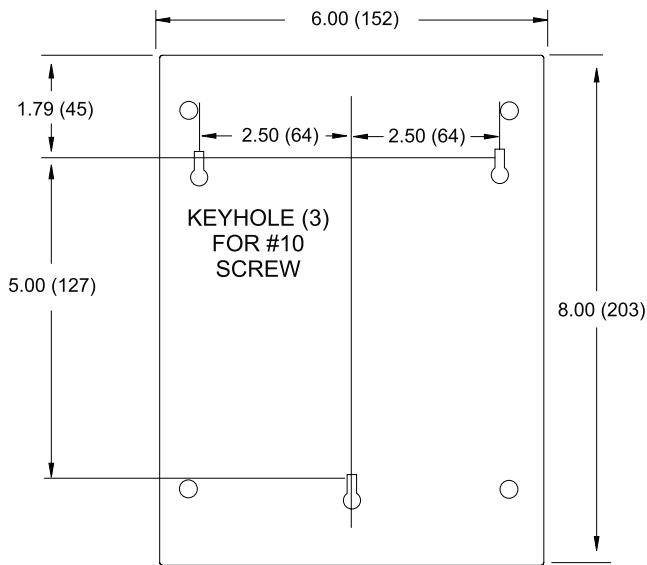
Product Demonstrators and Training

* Normally carried in stock

DISCOUNT VS-3DC

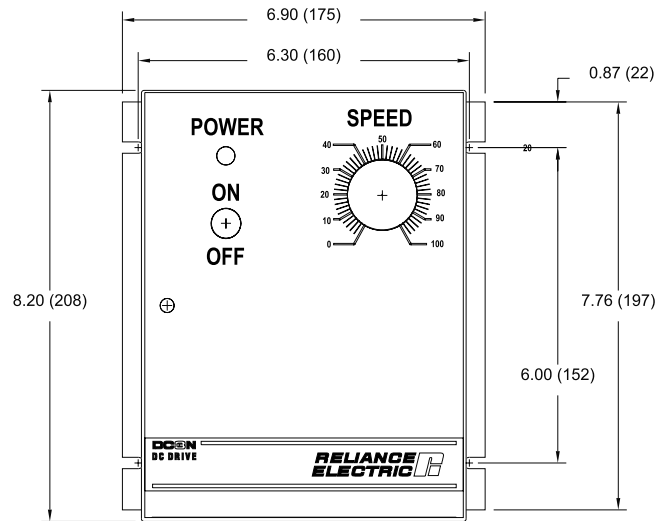
DC3N Non-Regenerative DC Drives

NEMA 1 Enclosed Dimensions DC3N-12D-01-010-AN

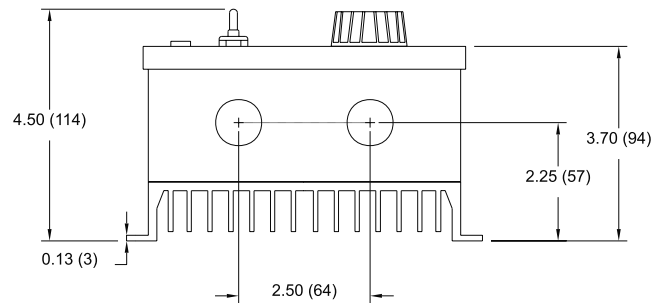


TWO 0.88 (22) CONDUIT HOLES

NEMA 4X/12 Enclosed Dimensions DC3N-12D-4X-010-AN

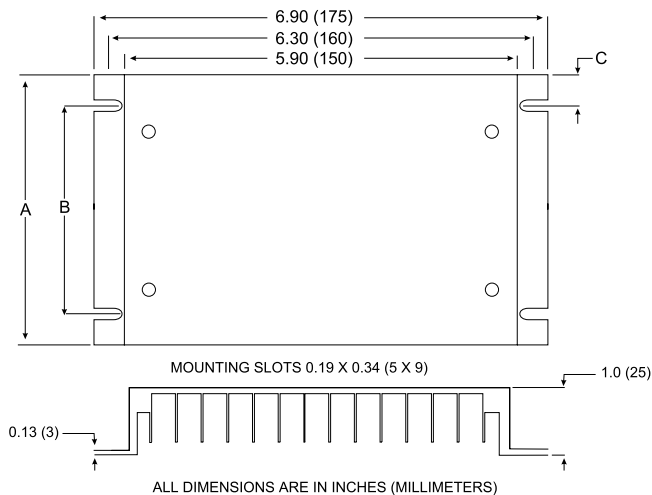


FOUR MOUNTING SLOTS 0.19 (5) WIDE



TWO 0.88 (22) KNOCKOUTS
ALL DIMENSIONS IN INCHES (MILLIMETERS)

DC3N-HS-00 and DC3N-HS-01 Heatsink Dimensions

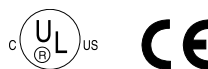


Part Number	Dim A	Dim B	Dim C
DC3N-HS-00	4.40 (112)	3.00 (76)	0.7 (18)
DC3N-HS-01	7.78 (198)	6.00 (152)	0.89 (23)

DC3N Non-Regenerative DC Drives

PRICING

1/8 - 1.0 HP @ 115 VAC, 1-Ph, 50/60 Hz: 90 VDC Armature
 1/4 - 2.0 HP @ 230 VAC, 1-Ph, 50/60 Hz: 180 VDC Armature
 For the Operation of Permanent Magnet & Shunt Wound DC Motors



Product Features: DC3N Enhanced Models

- **Selectable voltage input:** 115 or 230 VAC
- **Fused AC line input connections:** L1 & L2
- **Selectable armature voltage output:** 90 or 180 VDC
- **Dual Voltage Field supply rated at 1 amp continuous**
- **Tachometer feedback acceptable range of:** 7 VDC/1000 to 50 VDC/1000
- **Speed regulation and range:**
 - 0.1% speed regulation with tachometer feedback; 1.0% speed regulation with armature voltage feedback
 - 60:1 speed range with tachometer feedback
- **Door mounted operator devices (NEMA 4X/12 enclosure)**
 - Power On/Power Off selector switch and power on indicator light
 - Auto/manual selector switch
 - Switches between 0-10 V local (Speed Pot) and 0-10 V remote or 4-20 mA remote
 - Speed potentiometer
- **Control speed from a non-isolated external reference: 0-10 VDC or 4-20 mA**
 - These models include reference input isolation for use when the analog reference source is not isolated
- **On-board LEDs for diagnostics:**
 - Power-ON indication
 - Current/torque limit indication
- **Inhibit circuit connection for interfacing to external control logic allows zero speed operation**
- **Independent potentiometer adjustments for:**
 - Minimum speed: 0-50%
 - Maximum speed: 0-100%
 - Acceleration: 0.5-10 sec.
 - Deceleration: 0.5-10 sec.
 - Current limit: < 200% ⁽¹⁾
 - Tachometer voltage: Adj.
 - IR compensation: 0-15%

HP Rating		"Isolated" Controller Selection - DC3N Models - 115/230 VAC, 1 Phase, 50/60 Hz						
115 VAC Input	230 VAC Input	Enclosure Type	Rated AC Line (Amps)	DC Armature Voltage	Rated Armature Current (Amps)	Motor Field Voltage	Model Number	List
1/4 to 1.0	--	Plate	4.5 to 13	90	2.7 to 10	50/100	* DC3N-12D-00-010-AI	\$175
--	1/2 to 2.0	Plate	3.7 to 12	180	2.5 to 9.2	100/200		
1/4 to 1.0	--	NEMA 4X/12	4.5 to 13	90	2.7 to 10	50/100	* DC3N-12D-4X-010-AI	\$350
--	1/2 to 2.0	NEMA 4X/12	3.7 to 12	180	2.5 to 9.2	100/200		

(1) Settable to < 200%, drive rated for 150% for 1 minute

INSTRUCTION MANUAL

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DISCOUNT VS-3DC

NOTES