

## 3G SmartVFD Frame C Wiring Diagrams and Dimensional Drawings

### SPECIFICATION DATA

3G SmartVFD Frame Size C

460 Vac: 50 - 125 HP

208/230 Vac: 25 - 60 HP

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3G SMARTVFD FRAME C WIRING DIAGRAMS AND DIMENSIONAL DRAWINGS

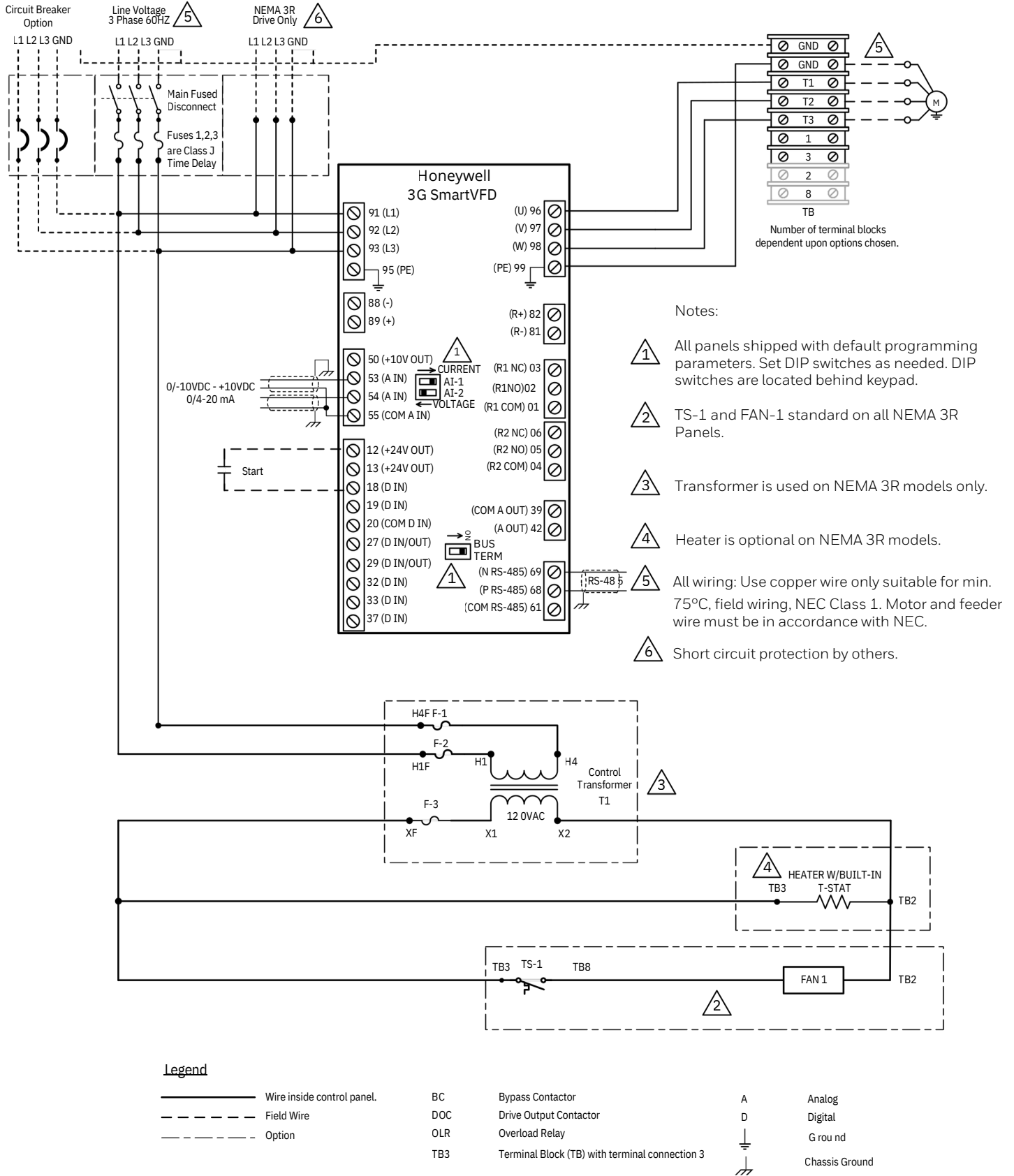


Fig. 1. - Frame C: Fused Disconnect, NEMA 3R Drive Only Wiring Diagrams.

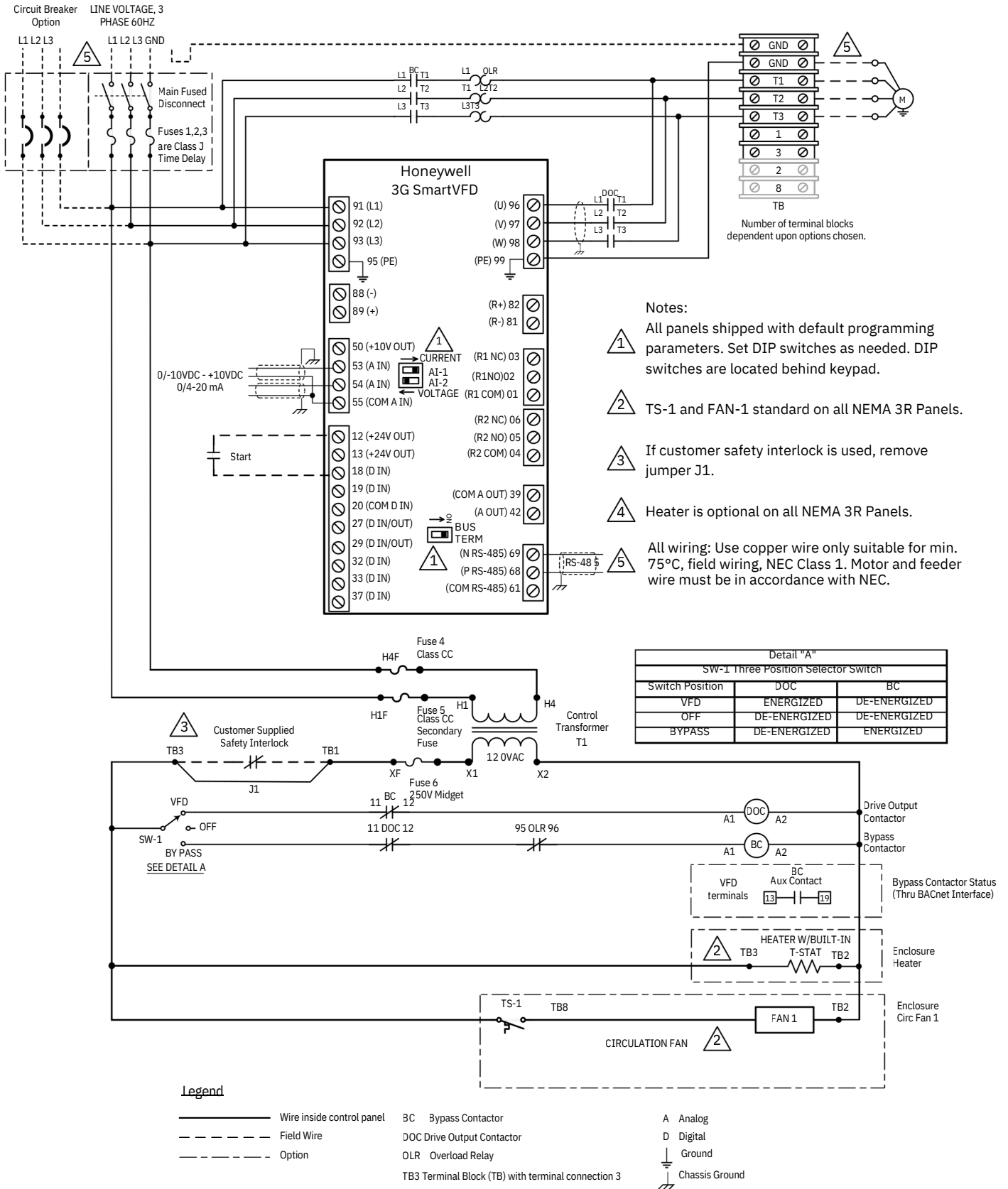


Fig. 2. - Frame C: 2 Contactor Wiring Diagrams.

3G SMARTVFD FRAME C WIRING DIAGRAMS AND DIMENSIONAL DRAWINGS

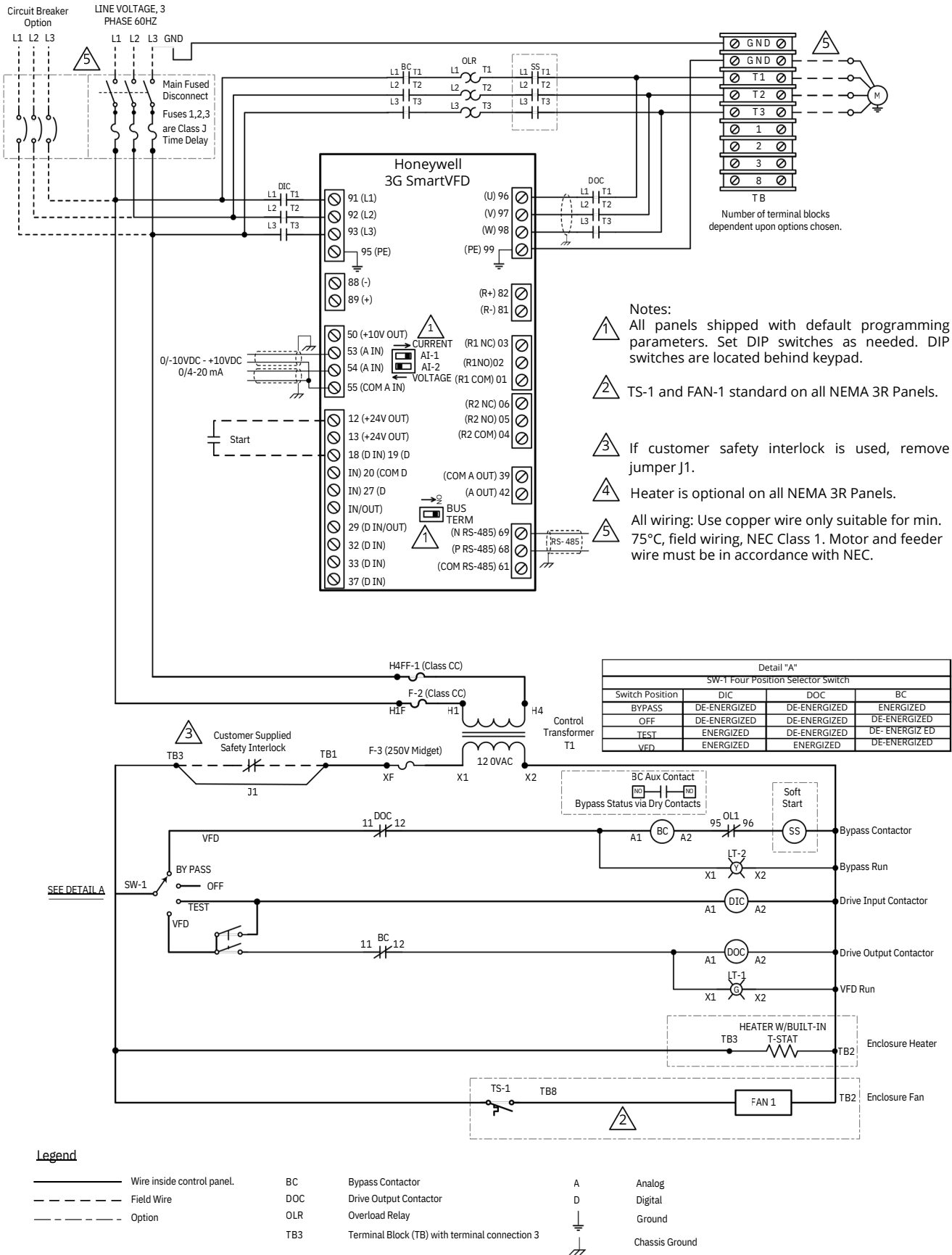


Fig. 3. - Frame C: 3 Contactor Wiring Diagrams.

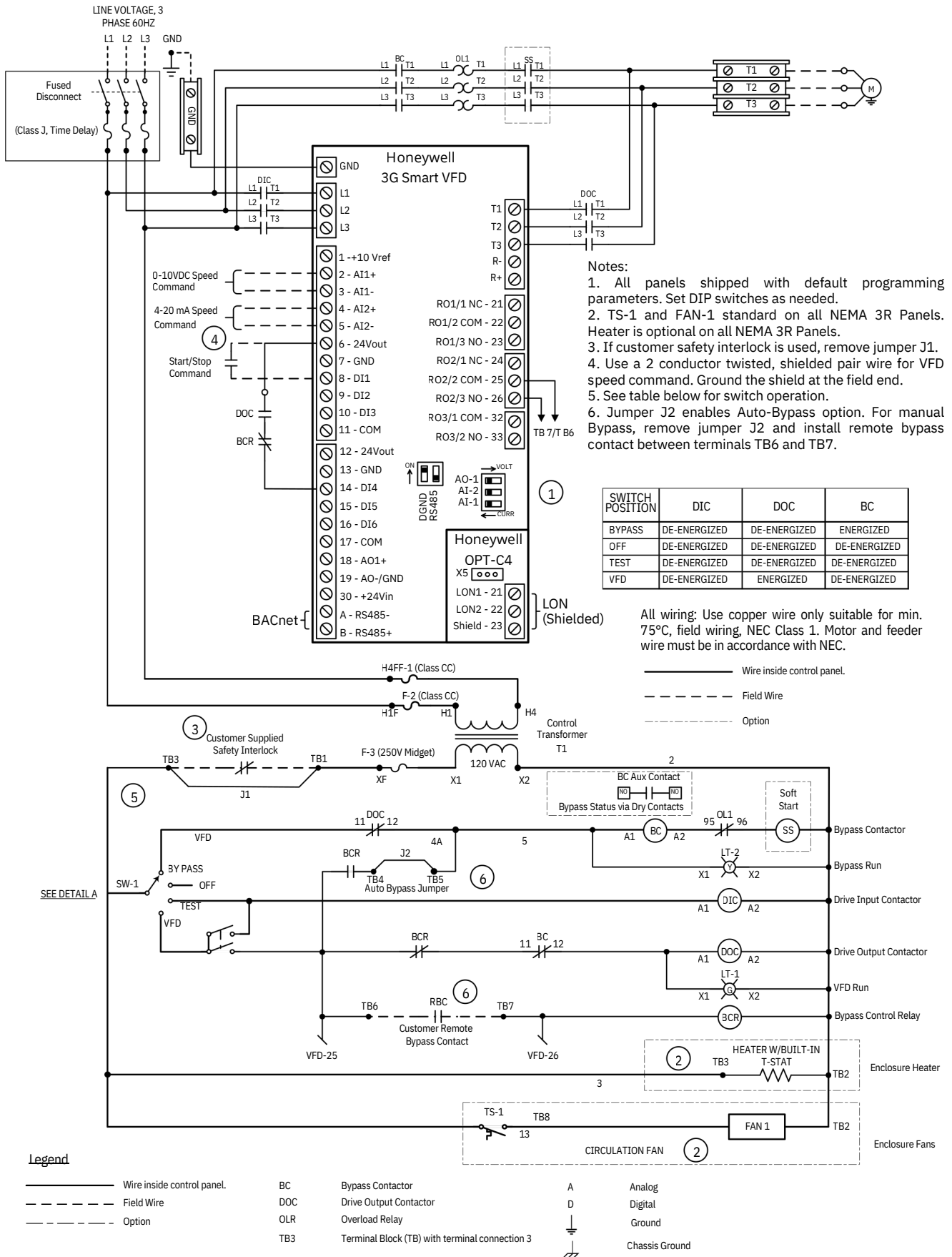
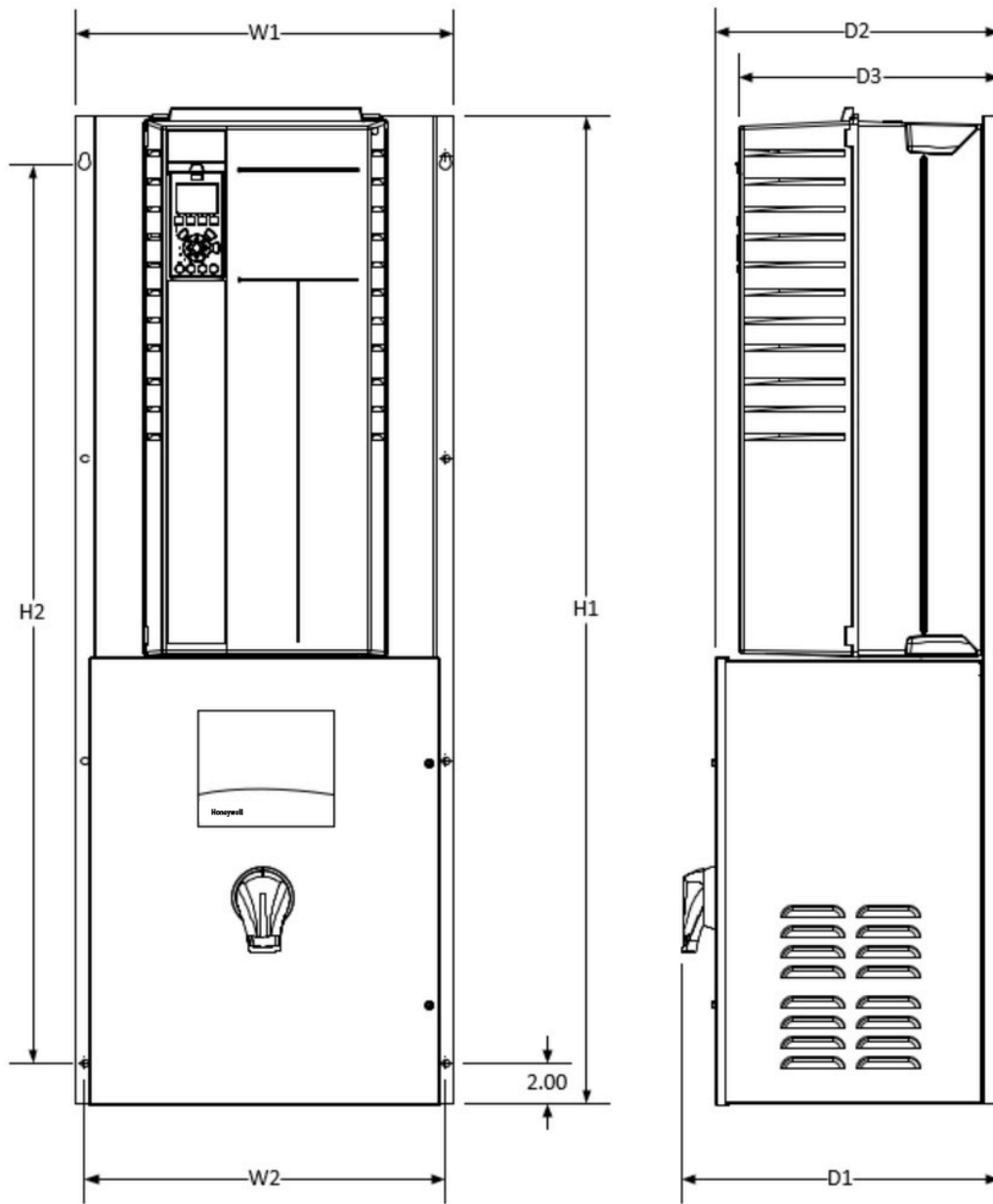
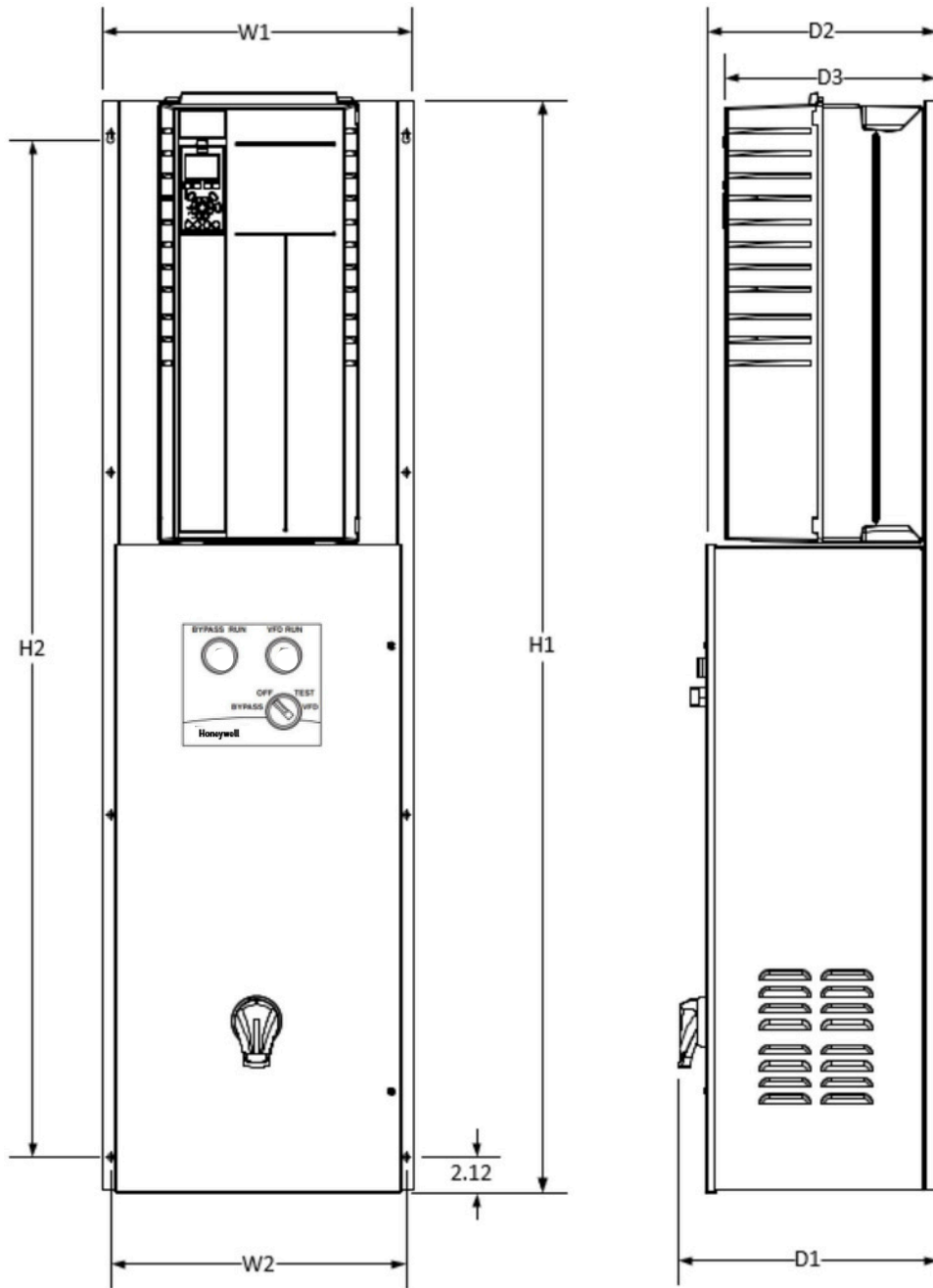


Fig. 4. - Frame C: 3 Contactor Auto-Bypass Wiring Diagrams.



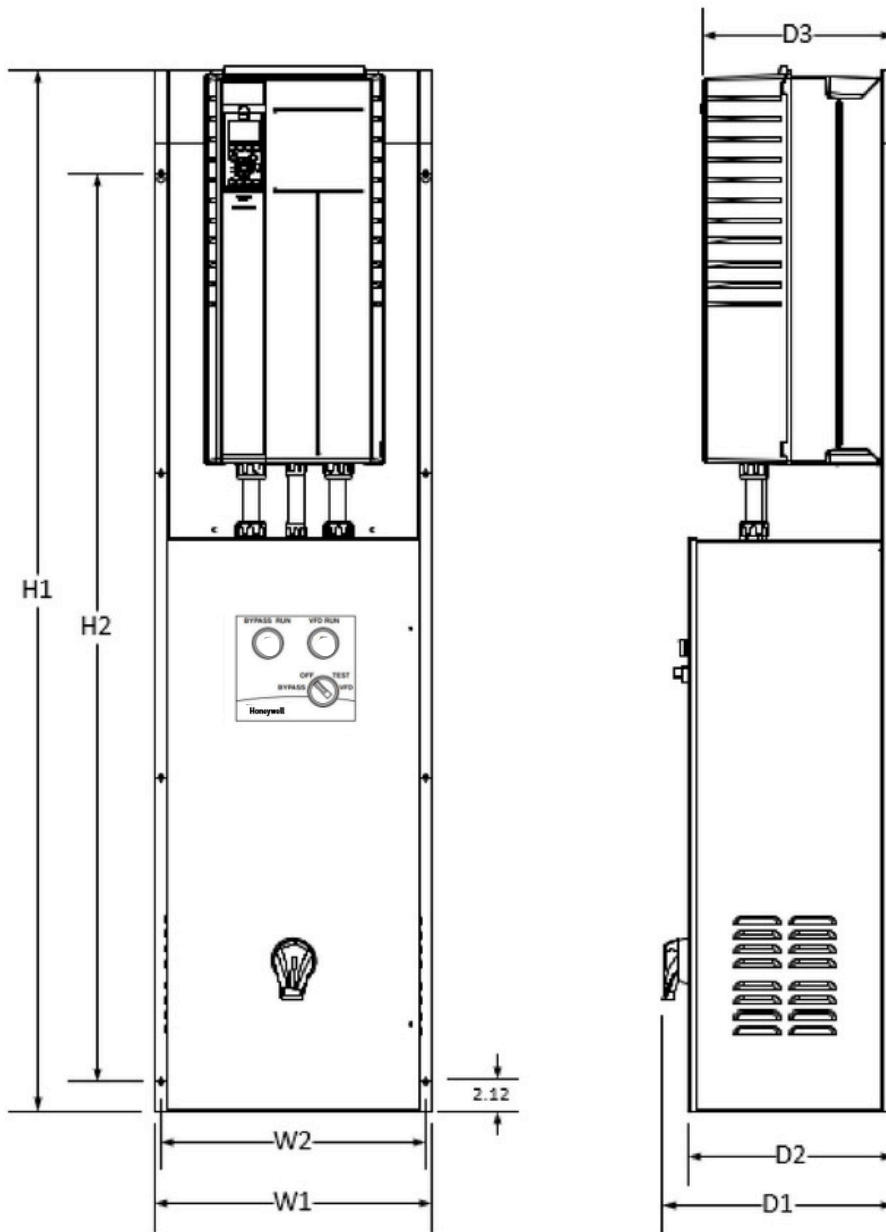
FRAME SIZE	HP AND VOLTAGE		CONFIGURATION	DIMENSIONS (inches)							WEIGHT LBS.
	208/230 VAC	460 VAC		W1	W2	H1	H2	D1	D2	D3	
C1	25HP,30HP, 40HP	50HP,60HP, 75HP	DISCONNECT	18.76	17.91	49.00	45.00	15.76	14.00	12.90	164
	25HP,30HP, 40HP	50HP,60HP, 75HP	2 CONTACTOR	18.76	17.91	66.12	62.00	15.76	14.00	12.90	172
C2	50HP,60HP	100HP, 125HP	DISCONNECT	23.76	22.92	60.00	56.00	15.76	14.00	13.94	238
	50HP,60HP	100HP, 125HP	2 CONTACTOR	23.76	22.92	78.00	74.00	15.76	14.00	13.94	246

Fig. 5. - Frame C: NEMA 1, Disconnect Only and 2 Contactor Dimensional Drawing.



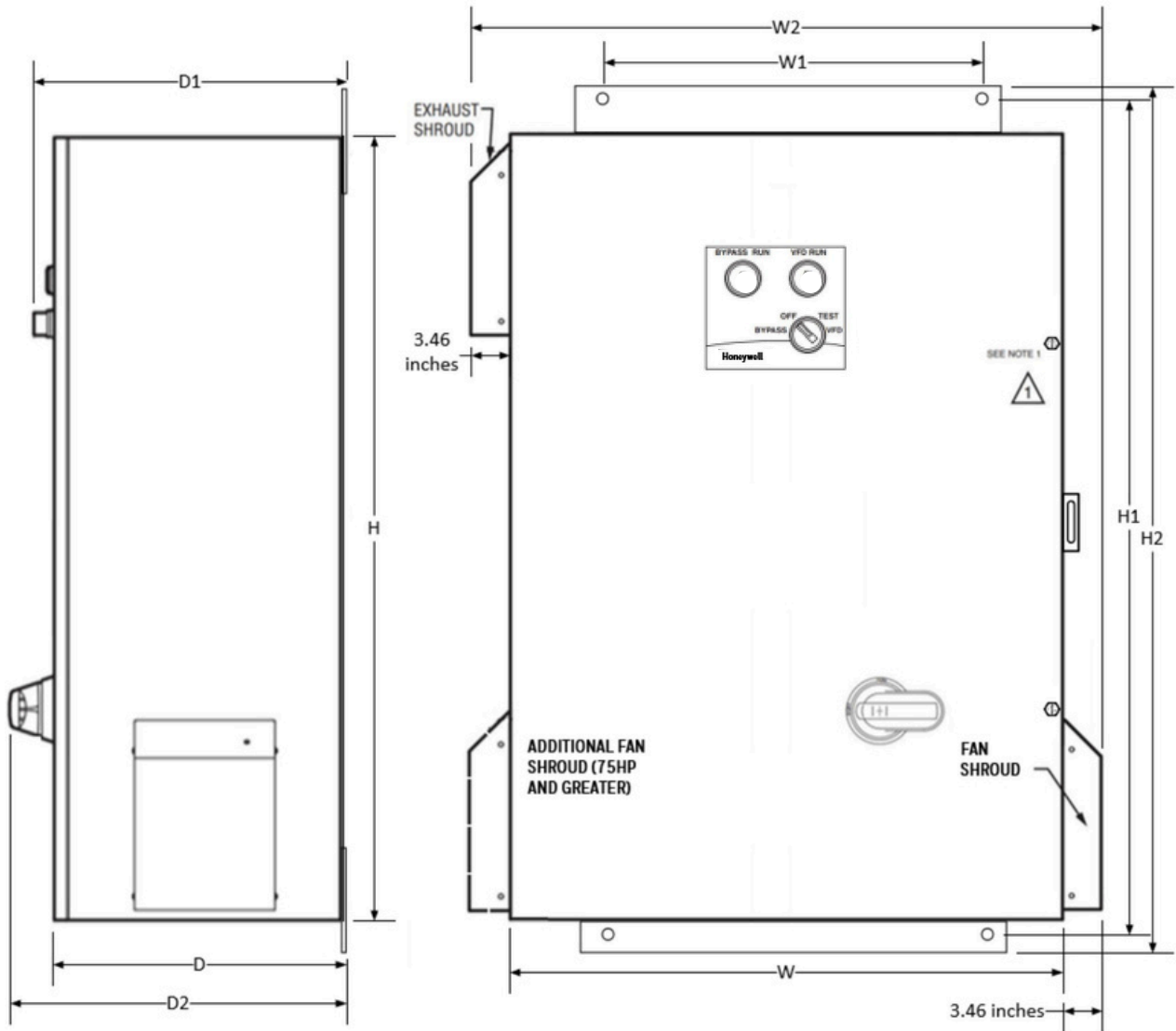
FRAME SIZE	HP AND VOLTAGE		CONFIGURATION	DIMENSIONS (inches)							WEIGHT LBS.
	208/230 VAC	460 VAC		W1	W2	H1	H2	D1	D2	D3	
C1	25HP,30HP, 40HP	50HP,60HP, 75HP	3 CONTACTOR	18.76	17.91	66.12	62.00	15.76	14.00	12.90	201
	25HP,30HP, 40HP	50HP,60HP, 75HP	3 CONTACTOR with AUTO BYPASS	18.76	17.91	66.12	62.00	15.76	14.00	12.90	202
C2	50HP,60HP	100HP, 125HP	3 CONTACTOR	23.76	22.92	78.00	74.00	15.76	14.00	13.94	288
	50HP,60HP	100HP, 125HP	3 CONTACTOR with AUTO BYPASS	23.76	22.92	78.00	74.00	15.76	14.00	13.94	292

Fig. 6. - Frame C: NEMA 1, 3 Contactor and 3 Contactor with Auto-Bypass Dimensional Drawings.



FRAME SIZE	HP AND VOLTAGE		CONFIGURATION	DIMENSIONS (inches)							WEIGHT LBS.
	208/230 VAC	460 VAC		W1	W2	H1	H2	D1	D2	D3	
C1	25HP,30HP, 40HP	50HP,60HP, 75HP	DISCONNECT	18.76	17.91	71.19	62.00	15.76	14.00	14.94	202
	25HP,30HP, 40HP	50HP,60HP, 75HP	2 or 3 CONTACTOR	18.76	17.91	71.19	62.00	15.76	14.00	14.94	214
	25HP,30HP, 40HP	50HP,60HP, 75HP	3 CONTACTOR with AUTO BYPASS	18.76	17.91	71.19	62.00	15.76	14.00	14.94	215
C2	50HP,60HP	100HP, 125HP	DISCONNECT	23.76	22.92	83.00	74.00	15.76	14.00	14.94	283
	50HP,60HP	100HP, 125HP	2 or 3 CONTACTOR	23.76	22.92	83.00	74.00	15.76	14.00	14.94	304
	50HP,60HP	100HP, 125HP	3 CONTACTOR with AUTO BYPASS	23.76	22.92	83.00	74.00	15.76	14.00	14.94	306

Fig. 7. - Frame C: NEMA 12, Disconnect Only, 2 Contactor, 3 Contactor and 3 Conatctor with Auto-Bypass



1 Qty (3) Latching Screw Bolts for Frame C1. Qty (4) Latching Screw Bolts for Frame C2. Optional locking hasp

FRAME SIZE	HP AND VOLTAGE		CONFIGURATION	DIMENSIONS (inches)								WEIGHT LBS.	
	208/230 VAC	460 VAC		W	W1	W2	H	H1	H2	D	D1		D2
C1	25HP,30HP, 40HP	50HP,60HP, 75HP	DRIVE or DISCONNECT	36.00	16.00	42.92	42.00	44.75	45.75	14.31	15.31	16.16	265
	25HP,30HP, 40HP	50HP,60HP, 75HP	2 or 3 CONTACTOR	36.00	16.00	42.92	42.00	44.75	45.75	14.31	15.31	16.16	296
	25HP,30HP, 40HP	50HP,60HP, 75HP	3 CONTACTOR with AUTO BYPASS	36.00	16.00	42.92	42.00	44.75	45.75	14.31	15.31	16.16	298
C2	50HP,60HP	100HP, 125HP	DRIVE or DISCONNECT	36.00	32.00	42.92	60.00	62.75	63.75	15.31	16.31	17.16	416
	50HP,60HP	100HP, 125HP	2 or 3 CONTACTOR	36.00	32.00	42.92	60.00	62.75	63.75	15.31	16.31	17.16	449
	50HP,60HP	100HP, 125HP	3 CONTACTOR with AUTO BYPASS	36.00	32.00	42.92	60.00	62.75	63.75	15.31	16.31	17.16	451

Fig. 8. - Frame C: NEMA 3R, Disconnect Only, 2 Contactor, 3 Contactor and 3 Contactor with Auto-Bypass.

**PRODUCT NOMENCLATURE**

HVFD3D 3 C 0100 G 1 0 0 B -XXXX

**Product Family**

HVFD3D	Honeywell3G SmartVFD
HVFD3B	Honeywell3G SmartVFD BYPASS

**Input Phase**

3	Three Phase
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**Nominal Voltage Note 1**

A	208/230
C	460
D	600

**Nominal Horsepower Note 2**

0015	1.5HP
0020	2HP
0030	3HP
0050	5HP
0075	7.5HP
0100	10HP
0150	15HP
0200	20HP
0250	25HP
0300	30HP
0400	40HP
0500	50HP
0600	60HP
0750	75HP
1000	100 HP
1250	125 HP
1500	150 HP
2000	200 HP
2500	250 HP
3000	300 HP
4000	400 HP

**Option Code (Refer to Specification & Install guide for Details)**

XXXX	"X" indicates no option selected, any other letter shown, then option is applicable per Options chart below
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**Application Note 3**

B	Denotes Model number for Bypass Assembly with VFD
C	Denotes Drive only, new 3G version

**Bypass Type**

0	No Bypass Option
1	Manual Bypass
2	Manual Bypass with Soft Start Option
3	Auto Bypass Option
4	Auto Bypass and Soft Start Option

**Contactors Note 4**

0	Drive Only
1	Fused Disconnect Only
2	Two C ontactor Bypass with Fused Disconnect
3	Three Contactor Bypass with Fused Disconnect
4	Circuit Breaker Disconnect Only
5	Two Contactor Bypass w / Circuit Breaker Disconnect
6	Three Contactor Bypass w / Circuit Breaker Disconnect

**Enclosure Type**

1	NEMA 1
2	NEMA 12
3	NEMA 3R
4	NEMA 3R with Heater

**Interface**

G	Graphical Keypad
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**Options Chart (XXXX)= No Options Selected**

**Communication Option Position 1 (X \_ \_ \_ ) Note 5**

X	BACnetMSTP (Standardbuild)
A	FactoryInstalled LonCard (HVFD3DOPTLON)
B	Factory Installed BACnet IP card (HVFD3DOPTBACIP)
C	Factory Installed MODbus Card (HVFD3DOPTMODIP)
D	Factory Installed Ethernet Card (HVFD3DOPTETHIP)

**Enclosure Material Type Position 2 ( \_ X \_ )**

X	PaintedCold RolledSteel(Standard Build)
S	StainlessSteel

**Keypad Location Position 3 ( \_ \_ X \_ )**

X	Factory Standard VFD Face (No Option Selected)
A	NEMA 1or NEMA 12 Cabinet Face
B	NEMA 3R Cabinet Face

**CUSTOM BUILD Position 4 ( \_ \_ \_ X )**

X	Standard Build (No Option Selected)
C	Custom Build, Call Factory for pricing & available options

**Notes**

- 600 Vac Drives with bypasses are Special Order. Call for assistance and pricing.
- Models 1.5HP - 150HP are included in price list. Call for special quote on 200 HP and above.
- Model numbers for Bypass application end in "B". VFD only part numbers will end in "C". If "Contactors" choice is "0" and "Bypass type" choice is "0" then "Application" must be "C". For a NEMA 3R Drive only application, the Model number will end in "C" since the unit is an assembly consisting of a NEMA 1 VFD factory installed in a NEMA 3R enclosure.
- If "Contactors" choice is 0 (Drive only), 1 (Fused Disconnect), or 4 (Circuit Breaker Disconnect) then "Bypass Type" choice must be "0". If "Contactors" choice is 2 or 5 (2 Contactor bypass) then "Bypass Type" choice must be "1". 2-Contactor bypass assemblies are available as manual bypass only.
- Option Chart denotes options available to modify standard Bypass models. Choice XXXX denotes a standard model with no factory options selected.

**ACCESSORIES**

TABLE	REFERENCE
Honeywell 3G SmartVFD Lon Card	HVFD3DOPTLON
Honeywell 3G SmartVFD Graphic Keypad	HVFD3DKEYPAD
Honeywell 3G SmartVFD Real Time Clock Card	HVFD3DOPTRTC
Honeywell 3G SmartVFD Ethernet IP Card	HVFD3DOPTETHIP
Honeywell 3G SmartVFD BACnet IP Card	HVFD3DOPTBACIP
Honeywell 3G SmartVFD Modbus TC/IP Card	HVFD3DOPTMODIP
Honeywell 3G SmartVFD Mounting Kit for Keypad on Door	HVFD3DDOORMOUNT
Honeywell 3G SmartVFD 3 meter Cable for Door Kit	HVFD3DREMOTE3M

**APPLICABLE TECHNICAL LITERATURE**

TABLE	REFERENCE
Honeywell 3G SmartVFD Installation and User Guide	31-00559-01

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## 3G SMARTVFD FRAME C WIRING DIAGRAMS AND DIMENSIONAL DRAWINGS

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