

CONTROL TECHNIQUES



DFS SERIES

READY TO USE, FAST TURNAROUND
HIGH POWER FREESTANDING DRIVES

DRIVE OBSESSED

DFS SERIES - FREE FREESTANDING DRIVES

PRE-ENGINEERED

ENCLOSED DRIVES

Control Techniques has set the standards in motor control since 1973.



Control Techniques' AC drives deliver the ultimate in control and dynamic response of AC induction and permanent magnet motors.

Unidrive M600, Unidrive M700 series and F600 Pump Drives are now pre-engineered and packaged into robust, highly configurable Drive Free Standing (DFS) solutions. Save engineering cost, resource, and time through easy configuration of quality packaged drive systems that are highly adaptable for stand-alone applications, or ready to integrate into a broader system suite.

The Control Techniques' Drive Freestanding is ready for fast deployment to minimize downtime in emergency situations, or short lead time project requirements.

NO EXTRA ENGINEERING REQUIRED

- Easy to integrate Rittal enclosures that include as standard: NEMA12 roof-vented, circuit breaker (35kA MCCB), fuses (UL), line and sharing chokes, and cabling (UL).
- Broad suite of option packages to meet various demanding applications and environments
- Increased safety against arc-flash with provisioning for isolator sequestering
- Compact design minimizes footprint
- Serviceable design, allowing fast and easy access to key components, including drive modules mounted on rail-system for safe, easy servicing



DFS SERIES - FREE FREESTANDING DRIVES

ORDERING INFORMATION

M600, M70x & F600 | 460 Vac | 3Phase Input and Output | 35°C | 95°F

Frame Size	Normal Duty 2 kHz		Heavy Duty 3 kHz	
	HP*	Amps	HP*	Amps
DFS1G4	125	155	100	134
DFS1H4	150	184	125	157
DFS1J4	175	221	150	180
DFS1K4	200	266	175	211
DFS1L4	250	320	200	270
DFS1M4	300	361	250	307
DFS1N4	350	437	300	377
DFS1P4	400	487	350	415
DFS1Q4	450	507	350	415
DFS2L4	500	608	450	513
DFS2M4	600	686	500	583
DFS2N4	700	830	600	716
DFS2Q4	850	963	700	789
DFS3N4	1000	1245	900	1075
DFS3P4	1150	1388	1000	1185
DFS3Q4	1250	1445	1000	1185

Factory Stocked: Ships in as little as 1 Business Day
NEMA12, Unidrive M700, Input Reactor, Fuses, Breaker, On-door Keypad

*Horsepower ratings reflect typical 4-pole 60 Hz motors.
For correct drive selection, use motor nameplate Amps .

Ratings

Power Range*: 100 – 1,250 HP
Supply Voltage: 460 and 575 VAC
Motor Current: 134 – 1,445 A

*Capabilities up to 2,000 HP

EASY TO CONFIGURE, READY TO SHIP

- Simple to quote- CT partners are equipped with online configurator to build and quote solutions in minutes.
- Factory stocked complete systems to support emergency shipment (select sizes)
- Rapid lead-times, in as little as**:
 - 1-5 days up to 450 HP
 - 5-10 days up to 1,250 HP

**Dependent on options and quantities

FACTORY OPTIONS

DRIVE:

- Unidrive M600, M700, M701, M702
- F600 Pump Drive
- 12-pulse & Active Front End options

ENVIRONMENT:

- Air Cooled UL Type 12, UL Type 3R
- Anti-Condensation Heaters
- Interior lighting options
- Plinth-base height options

SUPPLY:

- Trip Options
- Provisioning for Top or Bottom entry cabling
- Harmonic and EMC filter options

OPERATOR CONTROLS:

- Suite of door mounted controls including:
- HMI, RTC (Real -Time Clock) Keypad, Pushbuttons and Lamps, Power/Comms,
- Meters, Handles and Locks
- Absence of Voltage Tester for arc-flash safety precaution

MOTOR:

- dV/dt and sinusoidal filters
- Braking options
- Blower Starters

ADDITIONAL:

- Spare enclosures for added customer controls
- Additional terminal rails
- Incomer section isolation panel (sequestering for arc-flash protection)

DFS SERIES - FREE FREESTANDING DRIVES

DIMENSIONS

Dimensions



DFS2 up to 700 HP

DFS1 up to 450 HP

DFS3 up to 1,250 HP - not shown
NEMA 3R | UL TYPE 3R - not shown

UL TYPE 12 NEMA 12						
Size	Width		Depth*		Height	
	in	mm	in	mm	in	mm
DFS1	15.75	400	28.5	724	84	2135
DFS2	47.25	1200	28.5 [†]	724 [†]	84	2135
DFS3	78.87	1800	28.5	724	84	2135

UL TYPE 3R NEMA 3R						
Size	Width		Depth*		Height	
	in	mm	in	mm	in	mm
DFS1	23.62	600	36.37	923.8	85	2159
DFS2	70.79	1800	36.37	923.8	85	2159
DFS3	N/A	N/A	N/A	N/A	N/A	N/A

*Drive Heatsink is thru mounted and covered with NEMA 3R Shroud. Depth Dimension includes 12.5 in (30 mm) Heatsink Shroud.

[†]855HP Normal Duty 55.1 in (1400 mm)

*Drive Heatsink is thru mounted. Depth Dimension includes up to 4.625 in (117.5 mm) Heatsink extension from cabinet back.



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