

NHP medium voltage products and manufactured solutions



Modern protection system



Improved safety and functionality



Increased system reliability



Serviceability

	Medium voltage switchgear			Medium voltage transformers (Tx)		Medium voltage enclosed solutions for outdoor use			Motor control MV drives	
	Air insulated switchgear	Gas insulated switchgear		Cast resin transformers	Oil immersed transformers	Enclosed transformers	Enclosed switchgear	MV/LV kiosk substations	All purpose drives	Special purpose drives
Model type	DF-2 / DF-2+	DR/DT-6-C / DR/DT-6-C +	DR/DT-6-E / DR/DT-6-E +	TES-R	TES-OM	DFT	DFS	DFX	PowerFlex 6000T	PowerFlex 7000
Construction design ⁴⁾	Modular	Compact	Extensible	Cast resin	Hermetically sealed	Cast resin in MS, SS	MS, SS or Al	MS, SS or Al	Air cooled	Air or liquid cooled
IP rating ⁵⁾	IP4X	IP6X	IP6X	IP00	IP66	IP43	IP54	IP54/33D and IP54/23D	IP31 or IP42	IP21/NEMA Type 1 or IP42
Arc fault performance	Internal arc classification for switchgear ⁷⁾			Arc flash mitigation		Arc flash mitigation	Internal arc classification for kiosk ⁶⁾		Arc flash resistant enclosure	
	A-FL(R) 16kA/1s /B-FLR 20kA/1s	A-FL(R) 16kA/1s /B-FLR 20kA/1s	A-FL(R) 16kA/1s /B-FLR 20kA/1s	Arc mitigation by design ²⁾	Arc mitigation by design ²⁾	Arc mitigation by design ²⁾	IAC-AB Classification AS62271.202 ³⁾	IAC-AB Classification AS62271.202 ^{2) 3)}	No	Yes, ArcShield option available
Max. rated voltage ¹⁾	24kV	24 kV	24 kV	36kV	36kV	36kV	24kV	24kV	11kV	6.6kV
	Switchgear max. rated current ¹⁾			Tx rated power		Tx rated power	Max. rated current ¹⁾	Maximum rated power	Max. rated power output	
	1250A	630A	630A	50kVA – 6MVA	50kVA – 7MVA	50kVA – 6MVA	1250A	200kVA – 2.5MVA smaller 200kVA kiosks are required sometimes	10.650kW	6000kW / 5595kW
	Switchgear max. rated short circuit current ¹⁾			Tx partial discharge		Tx partial discharge	Switchgear max. rated short circuit current ¹⁾		Drives max. input voltage rating	
	25kA	25kA	25kA	<5 pC	<10 pC	<5 pC	25kA	25kA	13.8kV	6.6kV

Aviation power supplies

AC frequency converters

- 400 Hz output
- Pulse width modulation
- Step wave
- 50/60 Hz low frequency conversion

Pre-conditioned air (PCA) Diesel ground power (GPU)

- Frequency 400 Hz8
- VDC and 270 VDC

DC power supplies

- 28 VDC through 600
- FLA converters
- 270 VDC power converters and military
- Precision power converters

Combination converters

- 00 Hz/ 28 VDC/ 270 VDC

1) For switchgear, maximum voltage and currents will vary depending on the specific customer selected VCB
 2) Cast resin transformer 'arc mitigation design' is achieved with 'plug in bushings with earth screened HV terminations installed as per NHP recommendations
 3) When installed with DF-2+/DR-6+ (Arc-Killer) switchgear. Published DF2+/DR-6+ B-FLR IAC applies.
 4) For enclosed solutions, an enclosure can be made from either SS = Stainless Steel, MS = Mild Steel, Al = Aluminium

5) For cast resin Tx - IP54 applies to the MV/LV compartment, IP33D applies to the cast resin Tx compartment for oil immersed Tx - IP54 applies to the MV/LV compartment, IP23D applies to the oil Tx compartment For LRS Tank construction is IP42, control and switchgear panel is IP54
 6) IAC-AB for kiosks are by design
 7) A-FLR is achieved using an arc duct. Without an arc duct the DF2 achieves an IAC of A-FL 16kA/1s.