TECHNICAL DATA

DISSIMILAR PITCH NEUTRAL LIMITING REAC

GENERAL SPECIFICATIONS: VOLTAGE 690V or less, 3-ph, 3 or 4-wire, 60 or 50Hz **OPERATING TEMPERATURE RISE** 130°C (Max. Ambient of 40 deg C) **INSULATION CLASS** 220°C SYSTEM CONNECTION

Series connected in the common neutral of generator groups with dissimilar winding pitches

EQUIV. EFFICIENCY AT FULL LOAD > 99%

THROUGH IMPEDANCE (%Z) [4] Y-Z Term: ~ 45%

X-Y or X-Z Term: ~ 1% (saturated) WINDING MATERIAL

Copper

INSULATING VARNISH IMPREGNATION Polvester Resin

AUDIBLE SOUND LEVEL

As per NEMA ST-20 & CSA C9 Based on equivalent kVA

VENTILATION

Convection air cooled

WINDING MATERIAL

Copper

ENCLOSURE

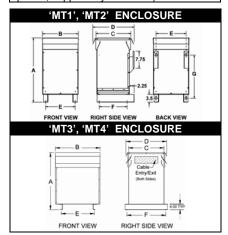
NEMA-3R, ventilated Type: Paint: Polyester powder coated ANSI 61 Grey Colour:

TEMPERATURE SWITCHES

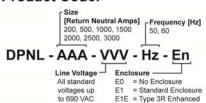
170°C [200°C]

OVER-TEMPERATURE ALARM

ALM2: Over-Temperature Alarm with horn and flashing light (requires separate power, supplied by customer)



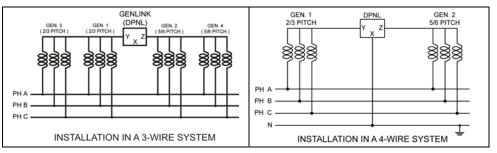
Product Code:



Sizes [60Hz]								Losses Connections		
DPNL Rating (Amps) [3]		Total Capacity of all Paralleled Sources kW [kVA] [2] [3]					Weight	@ Full Load	Mechanical Lugs Provided	
Return Neutral			460-480V	575-600V	660-690V	Case Style		(Watts)	Y and Z Terminals	X Terminal
200	100	68 [85]	250 [312]	320 [400]	360 [450]	MT1	150 [68]	150	250MCM-#6	250MCM-#6
500	250	160 [200]	640 [800]	800 [1000]	900 [1120]	MT2	330 [150]	315	600MCM-#2	2x600MCM-#2
1000	500	335 [420]	1280 [1600]	1600 [2000]	1800 [2250]	MT2	408 [185]	515	2x350MCM-#6	4x350MCM-#6
1500	750	500 [625]	2000 [2500]	2400 [3000]	2720 [3400]	MT3	500 [227]	765	Copper Pad	Copper Pad
2000	1000	675 [840]	2500 [3126]	3200 [4000]	3600 [4500]	MT3	560 [254]	800	Copper Pad	Copper Pad
2500	1250	840 [1050]	3200 [4000]	4000 [5000]	4500 [5625]	MT3	725 [329]	965	Copper Pad	Copper Pad
3000	1500	1000 [1250]	3800 [4750]	4800 [6000]	5475 [6843]	MT4	1169 [530]	1120	Copper Pad	Copper Pad

Sizes [50Hz]								Losses Connections		
DPNL Rating (Amps) [3]		Total Capacity of all Paralleled Sources kW [kVA] [2] [3]					Weight	@ Full Load	Mechanical Lugs Provided	
Return Neutral		208-240V	380-440V	575-600V	660-690V	Case Style	C [41	(Watts)	Y and Z Terminals	X Terminal
200	100	68 [85]	120 [150]	320 [400]	360 [450]	MT1	160 [73]	210	250MCM-#6	250MCM-#6
500	250	160 [200]	300 [375]	800 [1000]	900 [1120]	MT2	262 [119]	360	600MCM-#2	2x600MCM-#2
1000	500	335 [420]	620 [775]	1600 [2000]	1800 [2250]	MT2	527 [239]	630	2x350MCM-#6	4x350MCM-#6
1500	750	500 [625]	920 [1150]	2400 [3000]	2720 [3400]	MT3	680 [309]	850	Copper Pad	Copper Pad
2000	1000	675 [840]	1200 [1500]	3200 [4000]	3600 [4500]	MT3	749 [340]	1050	Copper Pad	Copper Pad
2500	1250	840 [1050]	1540 [1930]	4000 [5000]	4500 [5625]	MT4	863 [392]	1250	Copper Pad	Copper Pad
3000	1500	1000 [1250]	1840 [2300]	4800 [6000]	5475 [6843]	MT4	1241 [563]	1350	Copper Pad	Copper Pad

CASE STYLE		ENCLOSURE DIMENSIONS - inches [mm]									
Standard	Enhanced	Α	В	С	D	E	F	G			
MT1	MT1-E	29.00 [737]	16.75 [425]	15.00 [381]	19.00 [483]	13.75 [349]	13.00 [330]	19.50 [495]			
MT2	MT2-E	38.00 [965]	21.50 [546]	19.50 [495]	23.50 [597]	17.00 [432]	17.50 [445]	25.00 [635]			
MT3	MT3-E	45.00 [1143]	26.00 [661]	21.00 [534]	25.00 [635]	21.50 [546]	19.00 [483]				
MT4	MT4-E	51.50 [1308]	32.00 [813]	25.50 [648]	29.50 [749]	23.50 [597]	23.50 [597]				



Notes:

- Estimated values.
- 2. To size the DPNL, determine the total capacity in kW or kVA of all paralleled generators. Select the DPNL that corresponds to this value in the appropriate system voltage column. This will size the unit for a return neutral current rating that is at least 50% of the full current rating of the application. For 208-240V and 380-440V units, the return neutral rating will be at least 85% of the full current rating.
- 3. It is the Users responsibility to ensure that the actual return neutral current will not exceed the rating of the DPNL. If the return neutral current from all phase-to-neutral loads in 4-wire applications is expected to exceed the recommended DPNL rating, then select a larger size DPNL or use a Mirus NCE-FAI to reduce neutral current (consult factory for sizing). For 3-wire applications, or applications where return neutral current is known to be lower, the next smaller size can be selected.
- 4. The high impedance between Y-Z terminals prevents the flow of circulating current (predominantly triplen frequency) between the dissimilarly pitched generator groups. X-Y and X-Z impedances are the values to be used for 1-phase fault level calculations and are with core saturated. The DPNL will have no effect on 3-phase fault level.
- 5. DPNL is inserted in the common neutral where two or more generators of dissimilar pitch are connected together (see Connection Diagrams) or where generators are paralleled with an alternate source, such as the Utility. The DPNL is inserted in the neutral between the dissimilar groups.
- 6. The neutral should be grounded in only one location. If grounded at the switchboard or any other location, terminal X on the DPNL should not be grounded.
- 7. For additional information refer to: Typical Specifications, Application Notes, Internal Layout and Connection Diagrams.
- 8. End User is responsible for ensuring that the DPNL installation and wiring satisfies all applicable electrical and safety code requirements.

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9. Specifications are subject to change without notice.