



# APPLICATION FOR PREAPPROVAL

## SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

<b>APPLICATION NO.</b>
<b>OSP – 0030-10</b>

Check whether application is: NEW  RENEWAL

1.0 CUMMINS POWER GENERATION Julie Delago  
*Manufacturer* *Manufacturer's Technical Representative*  
 1400 73rd Ave NE, Fridley, MN – 55432 USA

*Mailing Address*

763-528-7362

*Telephone*

julie.m.delago@cummins.com

*E-mail Address*

2.0 CUMMINS Digital Master Controls Power Generation System Controller  
*Product Name* *Product Type*

**DMC 200-300, DMC-1000 and DMC-1500**

*Product model No (List all unique product identification numbers and/or serial numbers)*

*General Description:* The DMC 200-300 PowerCommand Digital MasterControl is a system level controller designed to interface directly with Cummins Power Generation PowerCommand paralleling generator sets. The DMC is a complete distributed logic control system for complex and demanding on-site power systems where reliability, performance, and flexibility are paramount.

The DMC1000 is a dedicated purpose microprocessor based controller that provides supervisory and power transfer functions (when required) for up to four generator sets with PowerCommand digital paralleling controls (PCC). The control system, in conjunction with the digital generator set controls, is a fully automatic, distributed logic arrangement suitable for use in unattended applications.

The DMC-1500 is a system level control that provides supervisory and power transfer functions (when required) for up to eight generator sets with PowerCommand digital paralleling controls (PCC). The DMC1500 in conjunction with the digital generator set controls, is fully automatic, distributed logic system that is reliable, flexible, and easy operate, maintain, and service.

3.0 Panache Engineering Inc Ahmed Haider, Ph.D., P.E.

*Applicant Company Name*

150 N Santa Anita Ave, Suite 300,  
Arcadia, CA 91006

*Mailing Address*

(626) 698-0784

*Telephone*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

*Signature of Applicant*

Engineering Manager  
*Title*

01/17/2012

*Date*

Panache Engineering Inc  
*Company Name*

1/11



Registered Design Professional Preparing the Report

4.0

PANACHE ENGINEERING INC

<b>AHMED HAIDER, Ph.D, P.E.</b>		<b>C68541</b>
<i>Contact Name</i>		<i>California License Number</i>
150 N. SANAT ANITA AVE, SUITE 300,		ARCADIA, CA 91006
<i>Mailing Address</i>		
626-203-6401	AHMED.HAIDER@PANACHEG.COM	
<i>Telephone</i>	<i>E-mail Address</i>	

California Licensed Structural Engineer Review and Acceptance of the Report

5.0

PANACHE ENGINEERING INC

<b>EUI S. KIM</b>		<b>S5138</b>
<i>Contact Name</i>		<i>California License Number</i>
150 N. SANTA ANITA AVE, SUITE 300, ARCADIA, CA 91006		
<i>Mailing Address</i>		
626-203-6401	PANACHEG@GMAIL.COM	
<i>Telephone</i>	<i>E-mail Address</i>	

Anchorage Pre-Approval

6.0

- Anchorage is pre-approved under OPA-  
(Separate application for anchorage pre-approval is required)
- Anchorage is not Pre-approved

Certification Method

7.0

- Testing in accordance with:
  - ICC-ES AC-156
  - Other (Please Specify):
- Analysis
- Experience data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0

<b>Wyle Laboratories, Inc.</b>		<b>Don Smith</b>
<i>Company Name</i>		<i>Contact Name</i>
7800 Highway 20 West Huntsville, AL 35806		
<i>Mailing Address</i>		
256-837-4411	Don.smith@wyle.com	
<i>Telephone</i>	<i>E-mail:</i>	

2/11



**ENVIRON LABORATORIES, LLC**

**KENT ERICKSON**

*Company Name*

*Contact Name*

9725 Girard Avenue South · Minneapolis, MN 55431

*Mailing Address*

(952) 888-7795

KLE@environlab.com

*Telephone*

*E-mail:*



**Approval Parameters**

9.0

Design in accordance with ASCE 7-05 Chapter 13:  Yes  No

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 0.75  $S_{DS}$

$S_{DS}$  (Spectral response acceleration at short period) = See Tables 2, 3, and 4

$a_p$  (In-structure equipment or component amplification factor) = 2.5

$R_p$  (Equipment or component response modification factor) = 6.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = See Tables 2, 3, and 4

Building period limits (if any) = N/A

Overall dimensions and weight (or range thereof) = See Tables 2, 3, and 4

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15:  Yes  No

Design Basis of Equipment or Components ( $VW$ ) =

$S_{DS}$  (Spectral response acceleration at short period) =

$S_1$  (Spectral response acceleration at 1 second period) =

$R$  (Response modification coefficient) = 1.0

$\Omega_0$  (System overstrength factor) = 1.0

$C_d$  (Deflection amplification factor) = 1.0

$I_p$  (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007:  Yes  No

**10.0 List of attachments supporting the special seismic certification of equipment or components:**

- Test Report  Drawings  Manufacturer's Catalog  
 Calculations  Others (Please Specify):

**11.0 OSHPD Approval (For Office Use Only)**



2/28/12

December 31, 2016

Signature & Date

Approval Expiration Date

**M. R. Karim, SHFR**

$S_{DS}$  (g) = **See Section 9.0**  $z/h = 1.0$

Name & Title

Special Seismic Certification Valid Up to

Condition of Approval (if any):

4/11

Table 1

Special Seismic Certification Approved Units



Product Type: Digital Master Control Manufacturer: Cummins Power Generation

Product Function provides supervisory and power transfer functions for multiple generators

Certified Product Construction: 14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1 Certified Mounting Descriptions: Floor Mounted

Product Line Model Number Operating Weight Dimensions (inches) Unit

Product Line	Model Number	Operating Weight	Dimensions (inches)			Unit
			Length	Width	Height	
Digital Master Control	DMC-200/300	1000	30	30	90	UUT1

Approved Components

DMC-200/300 Components (UUT1)

MANUFACTURER	DESCRIPTION	SPECIFICATIONS	MODEL LINE	CPG PIN
<b>TABLE: HUMAN MACHINE INTERFACE</b>				
ADVANTECH	PC(OPERAT.INTERFACE)	TOUCHSCREEN, 2 SERIAL PORTS, 15" LCD DISPLAY	DMC 200/300	0300-5783
<b>TABLE: CONTROLLERS &amp; PCB PARTS</b>				
MODICON	MODULE-MOMENTUM ASSY	32 IN. TRUE HIGH, 24 VDC, 250 Ma	DMC 200/300	0300-5201-02
MODICON	MODULE-MOMENTUM ASSY	16 IN16 OUT, TRUE HIGH, 24 VDC, 250 Ma	DMC 200/300	0300-5201-06
MODICON	MODULE-CP1	QUANTUM, 768K TOTAL MEMORY, 24VDC	DMC 200/300	0326-0160-03
MODICON	MODULE-POWER SUPPLY	QUANTUM, 8A, 20-30 VDC	DMC 200/300	0326-0161-02
MODICON	MODULE-RELAY FORM A	QUANTUM, 16 NORMALLY OPEN OUTPUTS	DMC 200/300	0326-0166
MODICON	RACK	QUANTUM, 6 SLOTS	DMC 200/300	0326-0172-04
MODICON	CABLE DROP	8 FT LONG CABLE	DMC 200/300	0326-0173
MODICON	CABLE-PRG-MODSOFT	MODBUS PROGRAMMING CABLE, 12 FT	DMC 200/300	0326-0184
MODICON	MODULE-DC INPUT 24V	QUANTUM, 32 INPUTS, SOURCE	DMC 200/300	0326-0185
MODICON	CONNECTOR-CABLE TAP	RUGGEDIZED, MODBUS+	DMC 200/300	0326-0246
MODICON	TERMINAL STRIP	QUANTUM, 40 TERMINALS	DMC 200/300	0332-3523
ONAN	GENSET CONTROL MODULE (GCM)	PCCI GENSET	DMC 200/300	0541-0813
ONAN	GENSET LONWORKS CARD (GLC)	PCCI GENSET	DMC 200/300	0541-0809
ONAN	BUS PT/MFSS	BUS PT MODULE	DMC 200/300	0300-4985-04
<b>TABLE: POWER SUPPLY PARTS</b>				
ONAN	RECTIFIER-6A 400V	DIODE, POWER, CONTROLLED	DMC 200/300	0357-0030
ONAN	RECTIFIER (POWER)	DIODE, CONTROLLED, TRANSFER MOLDED PLASTIC CASE	DMC 200/300	0357-0114
ONAN	BATTERY	BEST BATTERY SYSTEM	DMC 200/300	0416-1143
ONAN	BATTERY (ASSY)	BEST BATTERY ASSEMBLY	DMC 200/300	0416-1147-01
<b>TABLE: RELAYS &amp; CONTACTORS</b>				
P & B	RELAY	CONTROL, 24 VDC COIL, 4 FORM C CONTACTS	DMC 200/300	0307-1821
DELTRON	RELAY	CONTROL, 24 VDC COIL, 3 FORM C CONTACTS	DMC 200/300	0307-2261
SQUARE-D	RELAY-CONTROL	24VDC COIL, UL AND CSA LISTED	DMC 200/300	0307-2861-06
SQUARE-D	CONTACT-LOW PWR COIL	24VDC, 18A, UL LISTED ABD CSA CERTIFIED	DMC 200/300	0307-2900-05
IDEC	SOCKET-RELAY	3 POLE, UL RECOGNIZED	DMC 200/300	0323-1410-01
IDEC	SOCKET-RELAY	4 POLE, UL RECOGNIZED	DMC 200/300	0323-1410-02
<b>TABLE: FUSES</b>				
GOULD	FUSE BLOCK	SINGLE POLE, 800V, 30A	DMC 200/300	0321-0344
BUSSMAN	FUSE	0.8A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC 200/300	0321-0363-03
BUSSMAN	FUSE	10A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC 200/300	0321-0363-28
<b>TABLE: TERMINAL BLOCKS</b>				
ONAN	SPACER-TERMINAL BLK	STAND-OFF, DIN RAIL TRACK	DMC 200/300	0306-3706
ONAN	PARTITION-TERMINAL	SMALL, FOR USE WITH ADJACENT JUMPERS	DMC 200/300	0332-2840-02
WEIDMULLER	END PLATE-TERMINAL	TERMINAL END PLATE	DMC 200/300	0332-2841
WEIDMULLER	TAG-TERMINAL	PRINT=1-50	DMC 200/300	0332-2842-01
WEIDMULLER	TAG-TERMINAL	PRINT=1-10	DMC 200/300	0332-2842-11
WEIDMULLER	TAG-TERMINAL	PRINT=1-20	DMC 200/300	0332-2842-12
WEIDMULLER	JUMPER-TERMINAL	2 POLE, SINGLE LEVEL	DMC 200/300	0332-2843-01
WEIDMULLER	JUMPER-TERMINAL	10 POLE, SINGLE LEVEL	DMC 200/300	0332-2843-04
WEIDMULLER	JUMPER-TERMINAL	10 POLE, DOUBLE LEVEL	DMC 200/300	0332-2843-08
WEIDMULLER	END BRACKET-TERMINAL	FOR USE ON MOUNTING RAIL	DMC 200/300	0332-2878
WEIDMULLER	RAIL-TERMINAL	TS 35 STANDARD MOUNTING RAIL, SLOTTED, BULK	DMC 200/300	0332-2878-01
WEIDMULLER	TERMINAL BLOCK	SINGLE POLE, SINGLE LEVEL	DMC 200/300	0332-3125-02
WEIDMULLER	TERMINAL BLOCK	SINGLE POLE, DOUBLE LEVEL, WITH INTERNAL LINK	DMC 200/300	0332-3125-04
<b>TABLE: CABLES</b>				
BELDEN	WIRE(SHIELDED CABLE)	#18 AWG, 4 CONDUCTORS, SHIELDED	DMC 200/300	0334-1332
ONAN	CABLE-TW PR PVC	COMMUNICATION CABLE, TWO TWISTE PAIRS, #22 AWG	DMC 200/300	0334-1350
OMNI CABLE	CABLE - 20 AWG	20 AWG CABLE ROLL	DMC 200/300	0334-1890
OMNI CABLE	CABLE - 14 AWG	14 AWG CABLE ROLL	DMC 200/300	0334-2230-12
<b>TABLE: OTHER PARTS/COMPONENTS</b>				
ONAN	PANEL-CONTROL	DMC REAR HALF PANEL	DMC 200/300	0300-5666-02
ONAN	PANEL-CONTROL	DMC SIDE HALF PANEL	DMC 200/300	0300-5667-02
RENU	MODICON GATEWAY	8-32 VDC, UL LISTED	DMC 200/300	0300-5926
SQUARE-D	CONNECTOR-MODBUS	96 PIN CONNECTOR KIT	DMC 200/300	0323-1735-01
SQUARE-D	CONNECTOR-MODBUS	TERMINATING CONNECTOR KIT	DMC 200/300	0323-1735-02
MODICON	CABLE-MODBUS TRUNK	TP-PVC VACCETED REEL, SPECIFIED FEET AS NEEDED	DMC 200/300	0326-0149-04
BITRONICS	TRANSDUCER-DIGITAL	3 PHASE MULTIFUNCTION, MODBUS PLUS COMMUNICATIONS	DMC 200/300	0326-0156-01
PANOUT	DUCT-WIRING	1.25" X 3.10" WIREWAY WITH COVER	DMC 200/300	0331-0590-01
MALLORY	SIGNAL-AUDIBLE	SOUND ALARM, 2800 CPS SOUND FREQUENCY	DMC 200/300	0333-0133
ONAN	SHEET-METAL	DOOR TOUCH SCREEN CUTOUT	DMC 200/300	0560-2638-02
ONAN	BRACKET - LIFTING	See Customer Specific Outline for QTY	DMC 200/300	0318-1759
ONAN	DOOR-UPPER MASTER LH	UPPER DOOR CUTOUT	DMC 200/300	0318-3462-01
ONAN	DOOR-BLANK	1/2 HIGH, 30" WIDE	DMC 200/300	0318-3464-06
ONAN	FRAME ASSY	30"W X 90"H X 30"D	DMC 200/300	0318-0598-09
ONAN	END COVER	30"D QTY 2 when Attached, 4 when Not Attached	DMC 200/300	0301-6750-03
ONAN	REAR COVER	30"W	DMC 200/300	0301-6750-07
ONAN	TOP COVER	30"W X 30"D	DMC 200/300	0301-6751-08
ONAN	GND BUS	Use when DMC is NOT Attached to power sections	DMC 200/300	0337-2432
ONAN	DOOR LATCH	DOOR LATCH	DMC 200/300	0406-0811-01
ONAN	HINGE	DOOR HINGE	DMC 200/300	0406-0686
ONAN	HINGE PIN	DOOR HINGE PIN	DMC 200/300	0301-4984
ONAN	LUG - GROUND	GROUND	DMC 200/300	0332-2016
ONAN	LABEL-LOGO-30"	CUMMINS LABEL	DMC 200/300	0098-8017-01
ONAN	LABEL-DIGI MA CONT	CUMMINS LABEL	DMC 200/300	0098-8017-01
ONAN	LABEL-POWER COMMAND	CUMMINS LABEL	DMC 200/300	0098-7398
ONAN	LABEL - DANGER	CUMMINS SAFETY LABEL	DMC 200/300	0098-7416
			DMC 200/300	0098-5387

5/11

Table 1 Continue

Special Seismic Certification Approved Units



Product Type: Digital Master Control Manufacturer: Cummins Power Generation

Product Function Provides supervisory and power transfer functions for multiple generators Certified Mounting Descriptions:

14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1 Floor Mounted

Product Line	Model Number	Operating Weight	Dimensions (Inches)			Unit
			Length	Width	Height	
Digital Master	DMC-1000	1000	30	30	90	UT2

Approved Components

DMC-1000 Components (UUT)

MANUFACTURER	DESCRIPTION	SPECIFICATIONS	MODEL LINE	CPG P/N
<b>TABLE: CONTROLLERS &amp; PCB PARTS</b>				
ONAN	PCB ASSY	SYSTEM I/O DEVICE	DMC1000	0327-1536
ONAN	PCB ASSY	DIGITAL I/O EXPANSION MODULE	DMC1000	0327-1265
ONAN	CONTROL ASSY	HMI-211 FOR USE WITH MCM3320	DMC1000	0300-8090
ONAN	HARNESS-CONTROL PNL	5 CONDUCTORS, #18 AWG	DMC1000	0338-4747
ONAN	ANNUNCIATOR	ANNUNCIATOR PANEL, 20 POINT	DMC1000	0300-5929
ONAN	BARGRAPH KIT	BARGRAPH PANEL DISPLAY	DMC1000	0300-6050-01
SQUARE D	SELECTOR SWITCH	SELECTOR SWITCH 2 POS MAINTAINED, KEYED	DMC1000	0308-1090-08
CUMMINS	PCB ASSY (CNTRL-3300)	MASTER SYNCHRONIZER MCM3320	DMC1000	0327-1520-01
ONAN	GENSET LONWORKS CARD	LONWORKS CARD FOR GENSETS	DMC1000	0541-0809
ONAN	BUS PTM/FSS	BUS PT MODULE	DMC1000	0300-4985-04
<b>TABLE: POWER SUPPLY PARTS</b>				
ONAN	RECTIFIER-6A 400V	DIODE, POWER, CONTROLLED	DMC1000	0357-0030
ONAN	RECTIFIER (POWER)	DIODE, CONTROLLED, TRANSFER MOLDED PLASTIC CASE	DMC1000	0357-0114
<b>TABLE: RELAYS &amp; CONTACTORS</b>				
SQUARE-D	CONTACT-LOW PWR COIL	24VDC, 16A, UL LISTED ABD CSA CERTIFIED	DMC1000	0307-2900-05
SQUARE-D	RELAY-CONTROL	24VDC COIL, UL AND CSA LISTED	DMC1000	0307-2881-08
SHALLCO	RELAY-COIL/OUT	4 DECK, MAINTAINED CONTACTS, RED LED INDICATOR	DMC1000	0307-3156-02
IEC	SOCKET-RELAY	4 POLE, UL RECOGNIZED	DMC1000	0323-1410-02
P & B	RELAY	CONTROL, 24 VDC COIL, 4 FORM C CONTACTS	DMC1000	0307-1821
SQUARE-D	CONTACT-LOW PWR COIL	24VDC, 12A, UL LISTED ABD CSA CERTIFIED	DMC1000	0307-2900-02
SCHWITZER	RELAY (SEL 331 MUL T)	MULTIFUNCTION, WITH REVERSE POWER, PROJECTION MNT	DMC1000	0307-3031-07
<b>TABLE: FUSES</b>				
SOULD	FUSE BLOCK	SINGLE POLE, 600V, 30A	DMC1000	0321-0344
BUSSMAN	FUSE	1A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC1000	0321-0363-04
BUSSMAN	FUSE	2A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC1000	0321-0363-11
BUSSMAN	FUSE	10A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC1000	0321-0363-28
BUSSMAN	FUSE	15A, CLASS CC, REJECTION TYPE, TIME DELAY	DMC1000	0321-0363-39
<b>TABLE: SWITCHES</b>				
ABB	SWITCH-SLIDE	RELAY TEST & CURRENT AND 4 POTENTIAL POLES	DMC1000	0308-1158-01
SHALLCO	SWITCH-ROTARY(MODE)	4 DECK, 20A 600V MAINTAINED CONTACTS	DMC1000	0308-1245-01
SHALLCO	SWITCH-ROTARY (BRKR)	3 POSITION, BREAKER CONTROL, 1 DECK	DMC1000	0308-1246-01
SQUARE D	SWITCH-PUSH BUTTON	E-STOP MUSHROOM HEAD PUSH BUTTON SWITCH	DMC1000	0308-1157
<b>Table: TERMINAL BLOCKS</b>				
WEIDMULLER	TERMINAL BLOCK	SINGLE POLE, SINGLE LEVEL	DMC1000	0332-3125-02
WEIDMULLER	TERMINAL BLOCK	SINGLE POLE, DOUBLE LEVEL, WITH INTERNAL LINK	DMC1000	0332-3125-04
GE	TERMINAL BLOCK	SHORTING BLOCK 600V, 30A, 5 POLE	DMC1000	0332-3178-01
ONAN	PARTITION-TERMINAL	SMALL, FOR USE WITH ADJACENT JUMPERS	DMC1000	0332-2840-02
WEIDMULLER	END BRACKET-TERMINAL	FOR USE ON MOUNTING RAIL	DMC1000	0332-2878
WEIDMULLER	RAIL-TERMINAL	TS 35 STANDARD MOUNTING RAIL, SLOTTED, BULK	DMC1000	0332-2879-01
WEIDMULLER	JUMPER-TERMINAL	2 POLE, SINGLE LEVEL	DMC1000	0332-2843-01
WEIDMULLER	JUMPER-TERMINAL	3 POLE, SINGLE LEVEL	DMC1000	0332-2843-02
WEIDMULLER	JUMPER-TERMINAL	3 POLE, DOUBLE LEVEL	DMC1000	0332-2843-06
WEIDMULLER	JUMPER-TERMINAL	10 POLE, DOUBLE LEVEL	DMC1000	0332-2843-08
WEIDMULLER	TAG-TERMINAL	PRINT=1-10	DMC1000	0332-2842-11
WEIDMULLER	TAG-TERMINAL	PRINT=1-50	DMC1000	0332-2842-01
WEIDMULLER	TAG-TERMINAL	PRINT=51-100	DMC1000	0332-2842-02
WEIDMULLER	END PLATE-TERMINAL	TERMINAL END PLATE	DMC1000	0332-2841
ONAN	SPACER-TERMINAL BLK	STAND-OFF, DIN RAIL, TRACK	DMC1000	0306-3706
<b>Table: CABLES</b>				
PANDUIT	DUCT-WIRING	1.25" X 3.10" WIREWAY WITH COVER	DMC1000	0331-0194
ONAN	CABLE-TW PR PVC	COMMUNICATION CABLE, TWO TWISTE PAIRS, #22 AWG	DMC1000	0334-1350
BELDEN	WRK(SHIELDED CABLE)	#18 AWG, 4 CONDUCTORS, SHIELDED	DMC1000	0334-1332
OMNI CABLE	CABLE - 18 AWG	18 AWG CABLE ROLL	DMC1000	0334-1842
OMNI CABLE	CABLE - 14 AWG	14 AWG CABLE ROLL	DMC1000	0334-2230-12
OMNI CABLE	CABLE - 20 AWG	20 AWG CABLE ROLL	DMC1000	0334-1890
<b>Table: OTHER PARTS/COMPONENTS</b>				
ONAN	PANEL-CONTROL	DMC REAR HALF PANEL	DMC1000	0300-5686-02
ONAN	FRAME ASSY	30"W X 90"H X 30"D	DMC1000	0319-0586-08
ONAN	SIDE COVERS	30"D	DMC1000	0301-9750-03
ONAN	REAR COVER	30"W	DMC1000	0301-9750-07
ONAN	TOP COVER	30"W X 30"D	DMC1000	0301-9751-08
ONAN	PANEL-CONTROL (REAR)	REAR CONTROL PANEL	DMC1000	0300-5686-02
ONAN	PANEL-CONTROL (SIDE)	SIDE CONTROL PANEL	DMC1000	0300-5687-02
ONAN	BRACKET - LIFTING	LIFTING BRACKET	DMC1000	0319-1759
ONAN	DOOR LATCH	DOOR LATCH	DMC1000	0408-0911-01
ONAN	HINGE	DOOR HINGE	DMC1000	0408-0848
ONAN	HINGE PIN	DOOR HINGE PIN	DMC1000	0301-4984
ONAN	GND BUS	GROUND BUS	DMC1000	0337-2432
ONAN	LUG - GROUND	GROUND LUG	DMC1000	0332-2016
ONAN	LABEL LOGO CUMMINS POWER GEN	LOCATE: UPPER LEFT CORNER OF EACH SECTION IN LINE-UP	DMC1000	0098-7902-09
ONAN	LABEL LOGO VES ADDRESS	LOCATE: BOTTOM OF EACH SECTION IN LINE-UP	DMC1000	0098-8506-02
ONAN	LABEL-DGTL MA CONT	CUMMINS LABEL	DMC1000	0098-7388
ONAN	LABEL-POWER COMMAND	CUMMINS LABEL	DMC1000	0098-7416
ONAN	LABEL - DANGER	CUMMINS SAFETY LABEL	DMC1000	0098-5387
ONAN	CRATE - DOMESTIC	36" X 36" X 94"	DMC1000	0414-1329

6/11

Table 1 Continue

Special Seismic Certification Approved Units



Product Type: Digital Master Control	Manufacturer: Cummins Power Generation
Product Function	provides supervisory and power transfer functions for multiple generators
Certified Product Construction:	Certified Mounting Descriptions:
14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1	Floor Mounted

Product Line	Model Number	Operating Weight	Dimensions (Inches)			Unit
			Length	Width	Height	
Digital Master Control	DMC-1500	1000	32	24.5	75	UUT3

**Approved Components**

**DMC-1500 Components (UUT3)**

MANUFACTURER	DESCRIPTION	SPECIFICATIONS	MODEL LINE	CPO P/N
<b>TABLE: HUMAN MACHINE INTERFACE</b>				
ALLEN-BRADLEY	SCREEN, TOUCH	15", 24VDC, CE, 1 ETHERNET, 1 SERIAL, 2 USB (12.974"H x 16.374"W x 2.546"D)	DMC 1500	A034N542
<b>TABLE: CONTROLLERS &amp; PCB PARTS</b>				
CUMMINS	SYSTEM I/O DEVICE AUX 101 & 102 KIT	16 G FORM OUTPUTS, 12 INPUTS	DMC 1500	A001R452
ALLEN-BRADLEY	MODULE, OUTPUT	FULL FEATURED	DMC 1500	A002F853
ALLEN-BRADLEY	MODULE, INPUT	16 OUTPUT (3.54"H x 1.59"W x 3.42"D)	DMC 1500	A034N560
ALLEN-BRADLEY	MODULE, CONTROL	16 INPUT (3.54"H x 1.59"W x 3.42"D)	DMC 1500	A034N557
		24VDC, 20 INPUT, 12 OUTPUT (3.93"H x 8.52"W)	DMC 1500	A034N555
<b>TABLE: POWER SUPPLY PARTS</b>				
PHOENIX CONTACT	CONVERTER	10A, 7.5 MN (5.11"H x 3.93"W x 4.92"D)	DMC 1500	A0282028
PHOENIX CONTACT	CONVERTER	120/240VAC TO 24VDC 10 AMPS (5.11"H x 2.36"W x 4.8"D)	DMC 1500	A0282053
PHOENIX CONTACT	CONVERTER	FL COM SERVER R8485 (3.9"H x 0.89"W x 4.67"D)	DMC 1500	A028F879
<b>TABLE: RELAYS &amp; CONTACTORS</b>				
PHOENIX CONTACT	CONTROL, RELAY	4 FORM C (1.109"H x 0.859"W x 1.281"D)	DMC 1500	A005F969
PHOENIX CONTACT	RELAY, CONTROL	6A 2 P.DT, 14mm WDEE (3.15"H x 0.55"W x 3.70"D)	DMC 1500	A034G798
PHOENIX CONTACT	RELAY, CONTROL	6A FORM C CONTACT, 6MM (3.15"H x 2.4"W x 3.70"D)	DMC 1500	A034E763
PHOENIX CONTACT	RELAY, CONTROL	14 P.DT, 2.441"H x 1.181"W x 1.250"D	DMC 1500	A005F113
TELEMECANIQUE	RELAY SOCKET	4 NO, 1 NC (3.03"H x 1.77"W x 3.76"D)	DMC 1500	A001N067
TELEMECANIQUE	RELAY, CONTROL	4 NO, 1 NC (3.03"H x 1.77"W x 3.76"D)	DMC 1500	A001N067
<b>TABLE: CIRCUIT BREAKERS</b>				
SQUARE D	BREAKER, MINATURE	1P C 4A, 240VAC, 125VDC (4.21"H x 0.71"W x 2.97"D)	DMC 1500	A034H176
SQUARE D	BREAKER, MINATURE	1P B 1A, 480VAC UL1077 (3.19"H x 0.71"W x 2.97"D)	DMC 1500	A034Y026
SQUARE D	BREAKER, MINATURE	2P C 20A, 240VAC, 125VDC (4.21"H x 1.42"W x 2.97"D)	DMC 1500	A034H164
SQUARE D	BREAKER, MINATURE	1P C 1A, 240VAC, 125VDC (4.21"H x 0.71"W x 2.97"D)	DMC 1500	A034H172
SQUARE D	BREAKER, MINATURE	1P C 3A, 240VAC, 125VDC (4.21"H x 0.71"W x 2.97"D)	DMC 1500	A034H174
SQUARE D	BREAKER, MINATURE	1P C 10A, 240VAC, 125VDC (4.21"H x 0.71"W x 2.97"D)	DMC 1500	A034H170
SQUARE D	BREAKER, MINATURE	1P C 2A, 480VAC UL489 (5.59"H x 0.71"W x 2.97"D)	DMC 1500	A034Y024
SQUARE D	BREAKER, CIRCUIT	1P B 1A, 480VAC UL1077 (3.19"H x 0.71"W x 2.97"D)	DMC 1500	A034Y026
<b>TABLE: SWITCHES</b>				
SQUARE D	SWITCH, PUSHBUTTON	40MM E-STOP BUTTON (1.57" Dia., 2.1" Depth)	DMC 1500	A034L265
SQUARE D	SWITCH, PUSHBUTTON	40MM COLLAR (1.81"H x 1.14"W x 0.42"D)	DMC 1500	A034L722
SQUARE D	SWITCH, PUSHBUTTON	2 NORMALLY OPEN ASSEMBLY (2.01"H x 0.37"W x 1.26"D)	DMC 1500	A034L724
SQUARE D	SWITCH, PUSHBUTTON	2 NORMALLY CLOSE ASSEMBLY (2.01"H x 0.37"W x 1.26"D)	DMC 1500	A034L725
ELECTROSWITCH	SWITCH, AUTOMATIC MANUAL	2 POS MAINT, 10 C FORM CONTACTS (2.13"H x 2.13"W x 4.63"D)	DMC 1500	A034L730
SQUARE D	SWITCH, SELECTOR	3 POS RETURN TO CENTER (1.89"H x 2.01"W x 3.25"D)	DMC 1500	A034L728
<b>TABLE: TERMINAL BLOCKS</b>				
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 2-5	DMC 1500	A034N106
PHOENIX CONTACT	BLOCK, TERMINAL	UTME 5, 600V, 30A, 24-8 AWG	DMC 1500	A034N093
PHOENIX CONTACT	BLOCK, TERMINAL	UTMED 5, 600V, 30A, 24-8 AWG	DMC 1500	A034N096
PHOENIX CONTACT	BLOCK, TERMINAL	SB-ME 2-8, 2 POS, 30A	DMC 1500	A034N098
PHOENIX CONTACT	BLOCK, TERMINAL	D-UTTB 8	DMC 1500	A034N102
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 1/3/5-8	DMC 1500	A034N100
PHOENIX CONTACT	BLOCK, TERMINAL	D-UTTB 2, 5/4	DMC 1500	A030L842
PHOENIX CONTACT	BLOCK, TERMINAL	UTTB 2, 5-PV	DMC 1500	A034N108
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 10-5	DMC 1500	A030V661
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2-6-TG	DMC 1500	A034Y048
PHOENIX CONTACT	BLOCK, TERMINAL	P-C0	DMC 1500	A034Y046
PHOENIX CONTACT	BLOCK, TERMINAL	UTTB 2, 5-DI/O/O/U	DMC 1500	A034N110
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 5-5	DMC 1500	A034N104
PHOENIX CONTACT	BLOCK, TERMINAL	P-01	DMC 1500	A034Y044
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 5-5	DMC 1500	A034N104
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DMC 1500	A030V680
PHOENIX CONTACT	BLOCK, TERMINAL	CLPFIX 35-5	DMC 1500	A030V282
PHOENIX CONTACT	BLOCK, TERMINAL	FBS 3-5	DMC 1500	A030V471
PHOENIX CONTACT	BLOCK, TERMINAL	UT 2, 5, 600V, 30A, 28-10 AWG	DMC 1500	A030V678
PHOENIX CONTACT	BLOCK, TERMINAL	D-UT 2, 5/10	DM	

Table I Continue

Special Seismic Certification Approved Units



Product Type: Digital Master Control	Manufacturer: Cummins Power Generation
Product Function	provides supervisory and power transfer functions for multiple generators
Certified Product Construction:	Certified Mounting Descriptions:
14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1	Floor Mounted

Product Line	Model Number	Operating Weight	Dimensions (Inches)			Unit
			Length	Width	Height	
Digital Master Control	DMC-1500	1000	32	24.5	75	UUT3

Approved Components

DMC-1500 Components (UUT3) Continued.

MANUFACTURER	DESCRIPTION	SPECIFICATIONS	MODEL LINE	CPG P/N
<b>TABLE: CABLES</b>				
BORDERSTATES	CABLE ETHERNET	3 METER, ETHERNET PATCH CABLE	DMC 1500	A034N538
BORDERSTATES	CABLE ETHERNET	1 METER, ETHERNET PATCH CABLE	DMC 1500	A034N526
ALLEN-BRADLEY	CABLE NETWORK	SER. A 485 TO ML110 COMMS. CABLE	DMC 1500	A034N535
ASSMANN ELECTRONICS	CABLE NETWORK	(2.87"H x 1.26"W x 1.26"D)	DMC 1500	A034N524
DEKED	CABLE NETWORK	NULL MODEM, DESP ON BOTH ENDS	DMC 1500	A034J018
BELDEN	CABLE SHIELDED	STRAIGHT THROUGH CABLE	DMC 1500	A034B407
BELDEN	CABLE TW PR	3 PR. SHIELDED TWISTED PAIR COMMUNICATIONS CABLE	DMC 1500	A000Y856
<b>TABLE: OTHER PARTS/COMPONENTS</b>				
MCCAP	BLANK HOLE	30mm HOLE BLANK	DMC 1500	A034V570
MCCAP	BLANK HOLE	8mm HOLE BLANK	DMC 1500	A034V572
SUPPLY SOURCED	BOLT	M5 x 10 SIZED BOLT	DMC 1500	A005Y567
RITTAL	BOX, RECEPTACLE	A3 SIZE DOCUMENT HOLDER, PLASTIC (11.25"H x 17.87"W x 1.77"D)	DMC 1500	A034Z497
SQUARE D	DIODE LIGHT EMITTING	8mm LED, RD	DMC 1500	A034N545
SQUARE D	DIODE LIGHT EMITTING	8mm LED, GN	DMC 1500	A034N549
SILMKON	DUAL RECTIFIER	1000V CAPACITY RECTIFIER DIODE (3.62"H x 0.79"W x 1.18"D)	DMC 1500	A030K444
PHOENIX CONTACT	JUMPER RAIL	FIBST 500-PLC 03V	DMC 1500	A034G768
RITTAL	KEY SPARE	UNIVERSAL DOUBLE BIT ENCLOSURE KEY	DMC 1500	A034U800
CUMMINS	INSTALLATION LABELS	LABELS FOR EXTERNAL APPLICATION ON ENCLOSURE	DMC 1500	A035H335
RENU	MODBUS GATEWAY	LONWORKS FT10 - MODBUS RB232 (3.75"H x 2.0"W x 1.65"D)	DMC 1500	A001N462
WEIDMULLER	RAI - TERMINAL	TS 35 STANDARD MOUNTING RAIL, SLOTTED, BULK	DMC 1500	A005N703
SUPPLY SOURCED	RESISTOR METAL FILM	120 OHM RESISTOR	DMC 1500	A034Z492
MALLOY	SIGNAL BERT SOUND UNIT	2500HZ	DMC 1500	A006F809
HIRSCHMANN	SPIDER 8 TX ETHERNET SWITCH	RJ45, 10/100 MBITS (5.46"H x 1.38"W x 4.76"D)	DMC 1500	A029H452
SUPPLY SOURCED	SCREW, HOLLOW HEAD	BOLTS FOR DIN RAIL	DMC 1500	A005Z134
SUPPLY SOURCED	SCREW LOCKING	FLANGE TYPE LOCKING SCREW	DMC 1500	A005Z270
SUPPLY SOURCED	TE, CABLE	FAST ASSEMBLY CABLE TIE (5.89" LENGTH)	DMC 1500	A034Y050
SUPPLY SOURCED	WASHER FLAT	FLAT WASHER	DMC 1500	A007L395
SUPPLY SOURCED	WASHER LOCKING	LOCKING WASHER	DMC 1500	A007L147
SUPPLY SOURCED	SCREW, HEX HEAD	HEX HEAD LOCKING SCREW	DMC 1500	A005Y032
SUPPLY SOURCED	CAPACITOR, TANTALUM	5.6 MFD CAPACITOR	DMC 1500	A034Z485

8/11



Table 2

UUT1 Unit Under Test Summary Sheet



<b>Product Type: DIGITAL MASTER CONTROL</b>		<b>Manufacturer: CUMMINS POWER GENERATION</b>	
<b>Certified Product Construction:</b>	<b>Tested Configurations:</b>	<b>Tested Mounting Descriptions:</b>	
14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1	Floor Mounted	Attached to the table by means of (4) ASTM A325 Bolts	

UUT Properties

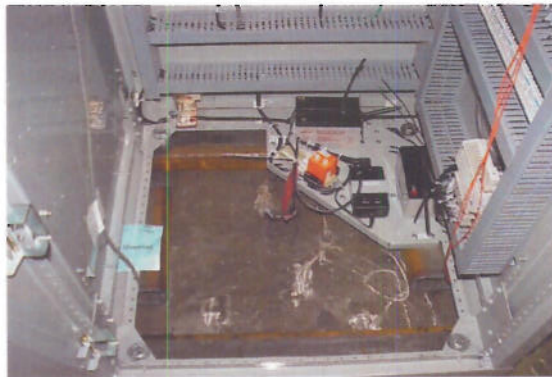
Model Number	Lowest Natural Frequency (Hz)				Dimensions (Inches)			Operating Weight(lb.)
	45 Degree	Front-Back	Side to Side	Vertical	Length	Width	Height	
DMC-200/300	N/A	12.62	12.6	7.5	30	30	90	1000

Seismic Test Parameters

Building Code	Test Criteria	Sds	z/h	Ip	Afx-H	Arig-H	Afx-V	Arig-V
CBC 2010	ICC-ES-AC156	1.88	1	1.5	3.00	2.25	1.30	1.00



DMC 200-DMC 300 Master Controller



TYPICAL MOUNTING CONFIGURATION

Panache Engineering Inc., 150 N. Santa Anita Ave Ste 300, Arcadia, CA 91006, Phone: 626-698-0784, Fax: 267-948-5441, www.panacheg.com

9/11

Table 3

UUT2 Unit Under Test Summary Sheet



Product Type: DIGITAL MASTER CONTROL      Manufacturer: CUMMINS POWER GENERATION

Certified Product Construction:	Tested Configurations:	Tested Mounting Descriptions:
14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1	Floor Mounted	Attached to the table by means of (4) ASTM A325 Bolts

UUT Properties

Model Number	Lowest Natural Frequency (Hz)				Dimensions (Inches)			Operating Weight(lb.)
	45 Degree	Front-Back	Side to Side	Vertical	Length	Width	Height	
DMC-1000	N/A	12.17	6.4	N/A	30	30	90	1000

Seismic Test Parameters

Building Code	Test Criteria	Sds	z/h	Ip	Aflx-H	Arig-H	Aflx-V	Arig-V
CBC 2010	ICC-ES-AC156	2.28	1	1.5	3.65	2.74	1.33	1.00



DMC-1000 General Test Layout (Front to Back Motion)



DMC-1000 Mounting Configuration

Panache Engineering Inc., 150 N. Santa Anita Ave Ste 300, Arcadia, CA 91006, Phone: 626-698-0784, Fax: 267-948-5441, www.panacheg.com

10/11

Table 4

UUT3 Unit Under Test Summary Sheet



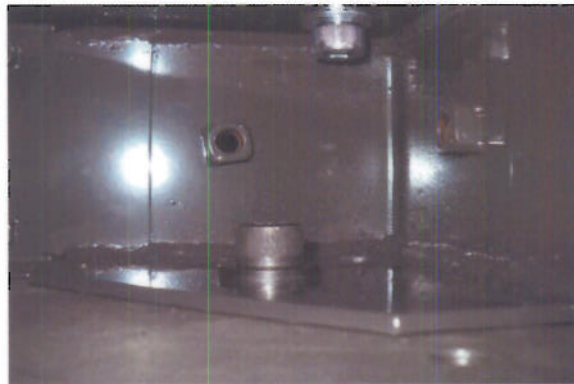
<b>Product Type: DIGITAL MASTER CONTROL</b>		<b>Manufacturer: CUMMINS POWER GENERATION</b>	
<b>Certified Product Construction:</b>	<b>Tested Configurations:</b>	<b>Tested Mounting Descriptions:</b>	
14 gage, ANSI 61 Gray painted, cold rolled steel enclosure, NEMA 1	Floor Mounted	Attached to the table by means of (4) ASTM A325 Bolts	

UUT Properties								
Model Number	Lowest Natural Frequency (Hz)				Dimensions (Inches)			Operating Weight(lb.)
	45 Degree	Front-Back	Side to Side	Vertical	Length	Width	Height	
DMC-1500	10.69	10.45	11.59	20.8	32	24.5	75	1000

Seismic Test Parameters								
Building Code	Test Criteria	Sds	z/h	Ip	Aflx-H	Arig-H	Aflx-V	Arig-V
CBC 2010	ICC-ES-AC156	2.5	1	1.5	4.00	3.00	1.68	0.68



DMC-1500 General Test Layout (Front to Back Motion)



DMC-1500 Mounting Configuration

Panache Engineering Inc., 150 N. Santa Anita Ave Ste 300, Arcadia, CA 91006, Phone: 626-698-0784, Fax: 267-948-5441, www.panacheeg.com

11/0