



CERTIFICATION RECORD

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File No: 081689 0 000

Class No: 3211 07 INDUSTRIAL CONTROL EQUIPMENT Miscellaneous Apparatus

SUBMITTOR

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ENGLAND

November 11, 1998(Replaces:October 21, 1998)

- Solid state relays, Type 6 Series, with Prefix "DMP", open type with dust cover, ratings as follows:

Type	Input Rating	Output Rating
DMP6101A	10-32V ac (32mA)	25mA, 30V dc
DMP6201A	120V ac (6mA)	25mA, 30V dc
DMP6202A	240V ac (6mA)	25mA, 30V dc
DMP6301A	5V dc (15mA)	3.0A, 60V dc
DMP6402A	5V dc (15mA)	3.0A (gen), 280V ac

Note: Open type devices are Certified as components for use only in other Certified equipment where the suitability is to be determined by the Canadian Standards Association.



- Solid state relay, open type, Model D1202-4192, 120V ac max, 2.5A max (general use), 2.1A max (incandescent), 1.2 FLA max (motor), input 1.5 - 5V dc.
- Solid state relays, open type, Model CS3933, input 3.5 to 7V dc, output 0.4 FLA, 1A gen or 1A incandescent lamp control at 280V ac.
- Solid state relays, open type, Models A or D followed by 1202, 1210, 1225 or 1240 and 4D1210, 120V ac max, 40A max (incandescent), 20 FLA max (motor), Models A or D followed by 2402, 2410, 2425, 2440, 2450, 2475 or 2490 and D2440-3457, 240V ac, max, 90A max (incandescent), 41 FLA max (motor), Model A, D, HA or HD followed by 4808, 4812 and D4812-3458, 480V ac max, 12A max (incandescent), 7 FLA max (motor), Model A, D, HA or HD followed by 4840, 480V ac max, 40A max (incandescent), 20 FLA max (motor), Model A, D, HA or HD followed by 4825, 480V ac max, 25A max (incandescent), 10 FLA max (motor), Model A, D, HA or HD followed by 4875, 480V ac max, 75A max (incandescent), 40 FLA (motor); Models A, D, HA or HD4850, 480V ac max, 50A max (general use), 40A max (incandescent), 20 FLA max (motor), Models A, D, HA or HD4890, 480V ac max, 90A max (incandescent), 41 FLA max (motor). - Solid state relay, Model A2425-4246, 90-280V input, 48-280V output, pick-up voltage $24V_{rms}$, drop-out voltage $1V_{rms}$. - Solid state relays, open type, Model S218, output 120V ac, 10A, 4.4 FLA, control 3-8V dc, Model S228, output 240V ac, 10A, 4.4 FLA, control 3-8V dc, Models S312 and S3012 and 3012A, output 120V ac, 2A, 2 FLA, control 3-8V dc, Models S322 and S3022 and S3022A, output 240V ac, 2A, 2 FLA, control 3-8V dc, Model S2115, output 120V ac, 15A, 7.2 FLA, control 3-8V dc, Model S2215, output 240V ac, 15A, 7.2 FLA, control 3-8V dc, Models TD2410-3452, TL110, TA1210 and TD1210, output 120V ac, 10A, 4.5 FLA, control 3-32V dc; Models TL210, TA2410 and TD2410, TD2410-3459, output 240V ac, 10A, 4.5 FLA, control 3-32V dc; Models TA1205 and TD1205 with suffixes, output 120V ac, 5A max (incandescent), 3 FLA, 18 LRA max, control 3-32V dc or 90-280V ac; Models TA2405 and TD2405 with suffixes, output 240V ac, 5A max (incandescent), 3 FLA, 18 LRA max, control 3-32V dc or 90-280V ac; Models TA1225 and TD1225 with suffixes, output 120V ac, 25A max (incandescent), 10 FLA, 60 LRA max, control 3-32V dc or 90-280V ac; Models TA2425 and TD2425 with suffixes and Model TD2425-3360 and TD2425-3499, output 240V ac, 25A max (incandescent), 10 FLA, 60 LRA max, control 3-32V dc or 90-280V ac.
- Solid state relays, open type, Model 6 (with suffixes), max ratings, input 75uA to 15mA, 0.8V dc to 32V dc or 120V ac or 240V ac; output 25mA to 3.5A dc, 30V dc to 60V dc and 3.5A rms, 140V ac or 280V ac.
- Input/output mounting boards Models MS-4 and -4H and MS-8H for use with relays Models 6.
- Solid state relays, open type, single pole, Model 6 (with suffixes), max ratings, input, 20mA max dc, output, 0.1A, 280V ac (general use).
- Solid state relays, open type, sealed, Model FC620, single pole, rated: 0.1A, 280V ac (general use); input: 20mA max dc.
- Solid state relays, open type, Series S4 rated as follows: Input models, logic supply voltage 4.5V dc to 18V dc, on state voltage at 20mA ax, 0.4V dc; input voltage range for Models S410, 10-32V dc, S411, 10-55V dc, S412, 40-120V dc, S420, 95-135V ac, S421, 180-270V ac. Output models, logic control voltage, 4 to 8V dc, load range for Models 430, 55V dc max, 4.0A dc max, S432, 55V dc max, 2.0A dc max, S440, 140V ac max, 4.0A max, S441, 280V ac max, 4.0A max, S442, 140V ac max, 2.0A max, S443, 280V ac max, 2.0A max.



● Solid state relays, open type, fully encapsulated, models with max. Ratings as follows:

Type	Rated Voltage	Control Voltage	Max Load+
CSD2410	240V ac	3.5-15V dc	10A
CSD2425	240V ac	3.5-15V dc	25A
CSD2440	240V ac	3.5-15V dc	40A
CSD2450	240V ac	3.5-15V dc	50A
CSD2475	240V ac	3.5-15V dc	75A
CSD2490	240V ac	3.5-15V dc	90A
CSE2410	240V ac	3.5-15V dc	10A
CSE2425	240V ac	3.5-15V dc	25A
CSE2440	240V ac	3.5-15V dc	40A
CSE2450	240V ac	3.5-15V dc	50A
CSE2475	240V ac	3.5-15V dc	75A
CSE2490	240V ac	3.5-15V dc	90A
CTD2410	240V ac	3-32V dc	10A
CTD2425		3-32V dc	25A
CTA2410	240V ac	90-140V ac	10A
CTA2425		90-140V ac	25A

- Solid state relays, open type, encapsulated, Types H10D, H10WD, H12D and H12WD, H12D Series (with suffixes), output ratings: with Suffix "4850", 50A (gen), 40A (incandescent), 600V ac; with Suffix "4890", 90A (gen), 90A (incandescent), 600V ac; input 3 to 32V dc.
- Solid state relays, open type, encapsulated, Types H10CA, H12CA, H10CD and H12CD (with suffixes), output ratings: with Suffix "4850" 50A, 600V ac; with Suffix "4890", 90A, 600V ac; input: 90-140V ac and 4 to 8V dc respectively.
- Solid state relays, open types, encapsulated, 1 pole, N.O., Type D Series followed by "4808C" rated 8A (gen), 480V ac; 2.5 FLA, 8A (incandescent), 480V ac; "4812C" rated 9A (gen), 480V ac; 5 FLA, 9A (incandescent), 480V ac; "4825C" rated 25A (gen), 480V ac; 10 FLA, 25A (incandescent), 480V ac; "4850C" rated 50A (gen), 480V ac; 40A (incandescent), 18 FLA, 480V ac; "4875C" rated 75A (gen), 480V ac; 40 FLA, 75A (incandescent), 480V ac; "4890C" rated 90A (gen), 480V ac; 41 FLA, 90A (incandescent), 480V ac; and Model CY4414 rated 50A, 480V ac, inputs rated: 3-32V dc.
- Solid state relays, Models CS5005, rated 300mA, 280V ac output; 5 or 10mA, 7V dc max input.
- Solid state relays, Models D2W202F, D2W203F and D2W203F-11, open type, encapsulated, input rated 3 to 28V dc, output rated 3A, 240V ac.

Notes:

1. The above model designations may have suffixes and/or prefixes.
2. Open type devices are Certified, as components, for use only in other Certified equipment where the suitability of the combination is determined by the Canadian Standards Association.
3. *This lamp rating is at 240V ac.



4. The ratings of the Models A, D, TA, TD and TD2425-3360 relays are based on the use of the submitters integral heat sink, Models HS-1, HS-2 and HE-54 or sized: 24 in by 9 in by 3.5 in overall (16 fins).
5. Type 6 Series relays may be provided with prefix DMP. 6. Type 6 Series relays with Suffix A are limited to 3.0A max. Rating for the above relays is based on the use of an external heatsink specified by the submitter's published literature.
6. Solid state relays (power ports), PRO Series, Model Nos and ratings are as listed below:

Model No	Max Operating Voltage	Rated Load Current	Isolation Between Terminals and Heatsink
PRO 2506	280Vrms	25A	4000Vrms
PRO 5006	280Vrms	50A	4000Vrms
PRO 5008	530Vrms	50A	4000Vrms
PRO 5012	530Vrms	50A	4000Vrms
PRO 9006	280Vrms	90A	4000Vrms
PRO 9008	580Vrms	90A	4000Vrms
PRO 9012	530Vrms	90A	4000Vrms

- Solid state relays, open type, fully encapsulated, model numbers and ratings are as listed below:

Models	Input	Output, General Use, Heating Incandescent or Ballast
CX240D5, CX240D5-5437, CX240D5R	3-15V dc	5A, 240V ac
CX240A5	120V ac	5A, 240V ac
CXE240D5, CXE240D5R	15-32V dc	5A, 240V ac
CXE240A5	24V ac	5A, 240V ac
CX380D5	3-15V dc	5A, 380V ac
CX380D5-4967	3-8V dc	5A, 380V ac
CXE380D5	15-32V dc	5A, 380V ac
CX480D5	3-15V dc	5A, 600V ac
CXE480D5	15-32V dc	5A, 600V ac



● Solid state relays, open type, fully encapsulated, models with max ratings as follows:

Type	Rated Voltage	Control Voltage	Max Load
A0241, A0241R	24-280V ac	4-10V dc	1A at 60C, gen use 0.8A at 80C, gen use
AS0241, AS0241R CX241, CX241R, MCX241, MCX241R	24-280V ac	4-10V dc	1.5A at 50C 1.1A at 80C

● Solid state relays, open type, with faster-on terminals, as follows:

Cat No	Input Rating	Max Output Rating
D1202F, D1202FC	3-32V dc	2.5A, 120V ac
D1210F, D1210FC	3-32V dc	10A, 120V ac
D1225F, D1225FC	3-32V dc	25A, 120V ac
D2402F, D2402FC	3-32V dc	2.5A, 240V ac
D2410F, D2410FC	3-32V dc	10A, 240V ac
D2425F, D2425FC	3-32V dc	25A, 240V ac
D2425-5018	3-32V dc	25A, 240V ac
TD2425F-5160	3-32V dc	25A, 240V ac
A1202F, A1202FC	90-280V ac	2.5A, 120V ac
A1210F, A1210FC	90-280V ac	10A, 120V ac
A1225F, A1225FC	90-280V ac	25A, 120V ac
A2402F, A2402FC	90-280V ac	2.5A, 240V ac
A2410F, A2410FC	90-280V ac	10A, 240V ac
A2425F, A2425FC	90-280V ac	25A, 240V ac
HD4812F, HD4812FC	3-32V dc	12A, 480V ac
HD4825F, HD4825FC	3-32V dc	25A, 480V ac
HA4812F, HA4812FC	90-280V ac	12A, 480V ac
HA4825F, HA4825FC	90-280V ac	25A, 480V ac
TD1210F, TD1210FC	3-32V dc	10A, 120V ac
TD1225F, TD1225FC	3-32V dc	25A, 120V ac
TD2410F, TD2410FC	3-32V dc	10A, 240V ac
TD2425F, TD2425FC	3-32V dc	25A, 240V ac
TA1210F, TD1210FC	90-280V ac	10A, 120V ac
TA1225F, TA1225FC	90-280V ac	25A, 120V ac
TA2410F, TA2410FC	90-280V ac	10A, 240V ac
TA2425F, TA2425FC	90-280V ac	25A, 240V ac



- Solid state relays, open type, Series EZ with suffixes, rated input 4 to 12V dc, 15 to 32V dc, 18-36V dc or 90-140V ac, max output 18A, 240V ac or 480V ac, (to be used with a 2 deg c/w external heatsink) and special Part Nos EZ240D18S-5197, input rated 3.5-32V dc and EZ480D18S-5204, input rated 4.5-32V dc, outputs rated max. 18A, 240 or 480V ac respectively.
- Solid state relays, open type, with suffixes, dual version, cat nos and max ratings as follows: (to be used with 0.4C/W heatsink)

	Model D2425D	Model D2440D D2440D-10-5123, D24400-10-4977
Ratings	One Side/Both Sides	One Side/Both Sides
General Use	25A/50A, 240V ac	40A/80A, 240V ac
Incandescent	15A/30A, 240V ac	25A/50A, 240V ac
FLA	7A/14A, 240V ac	12A/24A, 240V ac

- Solid state relays, open type, Cat Nos A0241 and A0241R, rated 1A, 280V ac (60C); 0.8A, 280V ac (80C).
- Solid state quad-style relays, open type, Model TD2420Q with suffixes, rated 20A, 240V ac, general use, single output and 60A, 240V ac, general use, max total output all four channels, 1 FLA, 6 LRA, 240V ac, control voltage 3-32V dc max; Model TD2420QCT with suffixes, rated 20A, 240V ac general use, single output and 40A, 240V ac max, general use, total output all four channels, 1 FLA, 6 LRA, 240V ac, control voltage 3-32V dc.
- Solid state relays, open types, with suffixes, Models and ratings as follows:

Type	Models	Input	Output
AC/IN	IAC5/MIAC5	7mA, 90-140V ac	100mA, 30V dc
AC/IN	IAC5A/MIAC5A	5mA, 180-280V ac	100mA, 30V dc
DC/IN	IDC5/MIDC5	8mA, 10-36V dc	100mA, 30V dc
DC/IN	IDC5B/MIDC5B	13mA, 3-32V dc	100mA, 30V dc
AC/OUT	OAC5/MOAC5	19mA, 3-6V dc	3A, 12-140V ac
AC/OUT	OAC5A/MOAC5A	19mA, 306V dc	3A, 24-280V ac
DC/OUT	ODC5/MODC	14mA, 3-6V dc	3A, 5-60V dc
DC/OUT	ODC5A/MODC5A	14mA, 3-6V dc	1A, 10-200V dc
AC/IN	IAC15/MIAC15	7mA, 90-140V ac	100mA, 30V dc
AC/IN	IAC15A/MIAC15A	5mA, 180-280V ac	100mA, 30V dc
DC/IN	IDC15/MIDC15	8mA, 10-36V dc	100mA, 30V dc
DC/IN	IDC15B/MIDC5B	13mA, 3-32V dc	100mA, 30V dc
AC/OUT	OAC15/MOAC15	20mA, 9-18V dc	3A, 12-140V ac
AC/OUT	OAC15A/MOAC15A	20mA, 9-18V dc	3A, 24-280V ac
DC/OUT	ODC15/MODC15	14mA, 9-18V dc	3A, 5-60V dc
DC/OUT	ODC15A/MODC15A	14mA, 9-18V dc	1A, 10-200V dc



AC/IN	IAC24/MIAC24	7mA, 90-140V ac	100mA, 30V dc
AC/IN	IAC24A/MIAC24A	5mA, 180-280V ac	100mA, 30V dc
DC/IN	IDC24/MIDC24	8mA, 10-36V dc	100mA, 30V dc
DC/IN	IDC24B/MIDC24B	13mA, 3-32V dc	100mA, 30V dc
AC/OUT	OAC24/MOAC24	15mA, 18-28V dc	3A, 12-140V ac
AC/OUT	ODC24/MODC24	10mA, 18-28V dc	3A, 5-60V dc
DC/OUT	ODC24A/MODC24A	10mA, 18-28V dc	3A, 5-60V dc
DC/OUT	ODC24A/MODC24A	10mA, 18-28V dc	1A, 10-200V dc

● Solid state relays, Series HA60/HD60, open type, with suffixes, models and ratings as follows:

Models	Input Voltage	Output Voltage	Current
HA6025	90-280V ac	48-660V ac	25A, 70 deg C
HD6025	3-32V dc	48-660V ac	
HA6050	90-280V ac	48-660V ac	50A, 60 deg C
HD6050	3-32V dc	48-660V ac	
HA6090	90-280V ac	48-660V ac	90A, 65 deg C
HD6090	3-32V dc	48-660V ac	
HD60110	90-280V ac	48-660V ac	110A, 65 deg C
HD60110	3-32V dc	48-660V ac	
HA60125	90-280V ac	48-660V ac	125A, 65 deg C
HD60125	3-32V dc	48-660V ac	
SMR2425 or CY5712	8-32V dc	48-280V ac	25
SMR2450	8-32V dc	48-280V c	50
SMR2490	8-32V dc	48-280V ac	90

● Solid state relays, Series SDV, SDI and DPA, open type, with suffixes, printed circuit board mounting type, models and ratings as follows:

Models	Input	Output Voltage	Current (max)
SDV2415	3.5-10V dc	12-280V ac	1.5A
SDV2415	3.5-10V dc	12-280V ac	1.5A
SDI2415	10-50mA	12-280V ac	1.5A
SDI2415R	10-50mA	12-280V ac	1.5A
DPA4111	10-50mA	20-140V ac	1.0A
DPA4119	3.5-10V dc	20-140V ac	1.0A
DPA6111	10-50mA	20-280V ac	1.0A
DPA6119	3.5-10V dc	20-280V ac	1.0A



- Solid state relays, 3-ph, Series 53TP, open type, with suffixes, rated as follows:

Models	Input Voltage	Output Voltage	Output Current (A)
D53TP25D	3-32V dc	48-600V ac	25
D53TP50D	3-32V dc	48-600V ac	50
A53TP25D	90-280V ac	48-600V ac	25
A53TP50D	90-280V ac	48-600V ac	50

- Solid state relays, Series ASPF and MPF, open type, with suffixes, printed circuit board mounting type, models and ratings as follows:

Models	Input	Output	Current (max)
ASPF240D3	4-10V dc	24-280V rms	3.0A
ASPF240D3R	4-10V dc	24-280V rms	3.0A
MPF240D4	4-10V dc	12-280V rms	4.0A
MPF240D4R	4-10V dc	12-280V rms	4.0A

Note: Above models have been evaluated for 3750V rms dielectric strength.

- Solid state relays, printed circuit board mounting type, Series MP, open type, with suffixes, models and ratings as follows:

Models	Input	Output	Current (max)
MP120D3	3-32V dc	12-140V ac	3
MP240D3	3-32V dc	24-280V ac	3
MP240D4	3-32V dc	24-280V ac	4

- Solid state relays, Series NTD/NTA, open type, with suffixes, models and ratings as follows:

Models	Input Voltage	Output Voltage	Current (max)
NTD2405	4-15V dc	24-280V ac	5
NTD2410	3-32V dc	24-280V ac	10
NTA2410	90-140V ac	24-280V ac	10
NTD2425	3-32V dc	24-280V ac	25
NTA2425	90-140V ac	24-280V ac	25

- Solid state relays, Series PCV, (proportional controller), open type, with suffixes, rated as follows:

Model	Input Voltage	Output Voltage (Vrms)	Current (max)
10PCV2415	2-10V dc	100-240	15
7PCV2415	2-7V dc	100-240	15
10PCV2425	2-10V dc	100-240	25



7PCV2425	2-7V dc	100-240	25
10PCV2450	2-10V dc	100-240	50
7PCV2450	2-7V dc	100-240	50
10PCV2475	2-10V dc	100-240	75
7PCV2475	2-7V dc	100-240	75
10PCV2490	2-10V dc	100-240	90
7PCV2490	2-7V dc	100-240	90

- Solid state relays, Series CMD and CMRD, open type, with suffixes, models and ratings as follows:

Models	Input Voltage	Output Voltage	Current
CMD24XX	3-32V dc	24-280V ac	25-125A
CMA24XX	90-140V ac	24-280V ac	25-125A
CMRD24XX	3-32V dc	24-280V ac	35-65A
CMRA24XX	90-140V ac	24-280V ac	35-65A
CMD48XX	4-32V dc	48-530V ac	25-125A
CMA48XX	90-140V ac	48-530V ac	25-125A
CMRD48XX	4-32V dc	48-530V ac	35-65A
CMRA48XX	4-32V dc	48-530V ac	35-65A
CMD60XX	4-32V dc	48-660V ac	25-125A
CMA60XX	90-140V ac	48-660V ac	25-125A
CMRD60XX	4-32V dc	48-660V ac	35-65A
CMRA60XX	90-140V ac	48-660V ac	35-65A

Note: XX is replaced with numerical numbers denoting current rating.

Notes:

1. Certified as components for use only in other Certified equipment where the suitability of the combination is determined by Canadian Standards Association.
2. Sold only to manufacturers for factory assembly of Certified electrical equipment.
3. These devices are not provided with electrical isolation between control and power circuits.
4. Model Nos PRO 9006, PRO 9008 and PRO 9012 are Certified for use only with an additional heatsink so that the temp rise at the field wiring terminals is less than 50C when wired with 60C or 60/75C conductors and 65C when wired with 75C conductors.
5. Cat Nos A0241 and A0241R were tested 1A, 280V ac, pf 80 percent at 60C ambient and 0.8A, 280V ac, pf 80 percent at 80C ambient.

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