



Certification Record

| CUSTOMER | CLASS | FILE |
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| IDEC Corporation 6-64 Nishimiyahara 2-Chome, Yodogawa-Ku Osaka 532-0004 Japan | <u>3211-03</u> INDUSTRIAL CONTROL EQUIPMENT-Motor Controllers - Auxiliary Devices | 021451_0_000 |
| Refer to Class Description for program details | | |



- Mono-lever switches, Series ARN, ARNS and ARNL, open types, max pilot duty ratings, 600V ac HD (heavy duty), 600V dc SD (standard duty).
- Pushbutton and selector switches, open-type, 600V ac max (heavy pilot duty), 600V dc max (standard pilot duty), Series N, and S.
- Pilot lights, open type, without transformer 30V ac/dc max, 120VAC, and 240VAC (with LED lamp) with transformer 600V ac max, Series N, and S.
- Illuminated pushbutton switches, open-type, consisting of combined assemblies of the above pushbutton and selector switches and pilot lights, Series N, and S.
- Contact Blocks, Type BS (with suffixes), 600V ac max (heavy pilot duty) (A600), 600V dc max (standard pilot duty) (P600) for use with Series TWTD, TWT, N and S operators.
- Contact blocks, Type BST (with suffixes), 5A, 125V ac; 3A, 250V ac, 1A, 600V ac, heavy pilot duty 120-600V ac (A600), standard pilot duty 110-600V dc (P600), for use with Series TWTD and TWT operators.
- Pilot lights, Models APD, APDG, APDE, APDGE, (alternate APD), Models APN, APNE, APNG and APNGE (alternate APN), Models UPQN and UPQNE (alternate UPQN), Models APW including APHW and APQW (alternate APW), Models APWD including APHWD, APQWD (alternate APWD) and Models APWN and UPQW, open type, without transformer 6 to 30V (28V ac/dc max 120VAC and 240VAC for LED lamp), except APWD, APWN 120V max, with transformer 100 to 480V (440V max for LED lamp), LED lamps, rated 6, 12, 15, 18, 24 and 28V ac/dc, 120VAC and 240VAC.
- Pushbutton, monolever and selector type switch operator assemblies, Series TW, open types, consist of operator and/or pilot light (with or without pilot light transformer) and/or contact blocks.
- Transformer, Series TW, open type for use with Series TWD, TW and TWS operators or pilot lights, primary 100-480V ac, secondary 6 to 7V ac, 1W max.
- Transformer, Series TWAR and TWAN, open type, for use with Certified illuminated pushbuttons and pilot lights, LED lamps only, primary 100 to 480V ac, 50/60Hz, secondary 6-30V ac.
- Transformer, Series TWR, open type for use with Certified illuminated pushbuttons and pilot lights, rating 2W max primary 100-480V ac, 50/60Hz; secondary 6-30V ac.
- Contact blocks, Series HW, HW-G and TW, open type, for use with Series TWD, TW and TWS switch operators max rating 600V ac, HD, (A600).

Note: The catalogue designations of the above units consist of the series designation may be prefixed by 2 or 3 letters and suffixed by 3 numbers or 3 numbers and a letter, denoting number of contact blocks, type of operator head, transformer rating (where applicable), number and arrangement of contacts, etc.

Notes:



1. The open type units listed above are Certified for mounting in industrial control panels or machine tool cavities, etc., where the combination is acceptable to CSA International.
 2. TW Series Transformers and Models APWD, APWN pilot lights above 150V are Certified for use in equipment where the short circuit capacity of the circuit is limited by fuses having ratings not exceeding the rating of the device, except 5A max for Models APWD and APWN.
- Series MA (with suffixes) switch units, open type, rated as follows: MA2L, MA3L, MA8L, MA2B, MA3B and MA8B Series, contact ratings: (gold overlaid) 125V ac, 0.1A res.; 30V dc, 0.1A, res.; (silver clad) 125V ac, 3A res.; 250V ac, 2A res.; 125V ac, 2A general; 250V ac, 1.5A general; 30V dc, 2A res.; 30V dc, 2A res.; 30V dc, 1A general; 125V dc, 0.4A res.; or 125V dc, 0.2A general. Lamp ratings (MA2L, MA3L and MA8L Series): 5, 6, 12, 24 and 28V dc LED. MA2P, MA3P and MA8P Series: Lamp ratings 5, 6, 12, 24 and 28V dc LED.
 - Contact block assemblies, Types 022 (TWD/TW), 025 (TWS/S) and 030 (TWTD/TWT/N) series comprising Certified contact block(s) and/or Certified transformer. Switches, open type, spdt or dpdt, illuminated or non-illuminated, Model HA-C and LA-T, with suffixes, rated with suffix "1" or "2", 0.1 A, 125 V ac (Res.), 0.1 A, 30 V dc (Res.), with suffix "5" or "6", 3 A, 125 V ac (Res.), 3 A, 250 V ac (Res.), 2 A, 30 V dc (Res.), 0.4 A, 125 V dc (Res.), 2 A, 125 V ac (Ind.), 1.5 A, 250 V ac (Ind.), 1 A, 30 V dc (Ind.), 0.2 A, 125 V dc (Ind.), with suffix "0" denoting no contacts, applicable lamp, max rating 30 V ac or dc, 1/2 W.
 - Pilot light, HA-P Series, either LED or incandescent lamp, max rating 30 V ac or dc, 1/2 W.
 - Switches, open type, spdt, dpdt, or three-pole, double-throw, illuminated or non-illuminated, Model LW-C with suffixes, rated with suffix "1", "2" or "3", 0.1 A, 125 V ac (Res.), 0.1 A, 30 V dc (Res.), with suffix "5", "6" or "7", 3 A, 125 V ac (Res.), 3 A, 250 V ac (Res.), 2A, 30 V dc (Res.), 0.4 A, 125 V dc (Res.), 2 A, 125 V ac (Ind.), 1.5 A, 250 V ac (Ind.), 1 A, 30 V dc (Ind.), 0.2 A, 125 V dc (Ind.), with suffix "0" denoting no contacts, applicable lamp, max rating 30 V ac or dc, 1 W. Alternate Ratings: For Model LW-C with suffix "5", "6", or "7" - 5A, 125V ac (Res), 5A, 250V ac (Res), 5A, 30V dc (Res), 1.1A, 125V dc (Res), 3A, 125V ac (Ind.), 1.5A, 250V ac (Ind.), 2A, 30V dc (Ind.), 0.4A, 125V ac (Ind.)
 - Pilot light, LW-P Series, either LED or incandescent lamp, max rating 30 V ac or dc, 1 W.
 - Contact units, Types HW-CB, HW-FB, HW-CL and HW-FL, may be followed by suffixes, contact rated A600, lamp input rated 6 to 120 V ac/dc, 1 W or transformer input rated 100 to 480 V, 50/60 Hz, or 100 to 240 V, 50/60 Hz for transformer HW-T, for assembling with operator units, Type HW with suffixes, with/without lamp to form illuminated or non-illuminated switches, consisting of Contact Blocks, Types HW-C10, -C01, -C10R, -C01R, -F10, -F01, -F10R, -F01R, -G10, -G01, -G10R and -G01R, and/or Transformers, Types TW, TW-S, HW-L and HW-T or direct adaptors, Types TW-DA1, TW-DA1F, HW-DA1, HW-DA1F and HW-GA1, and connecting units, Types HW-CB1C and -CB2C and -CBL and/or lamp.

Notes:

1. Open type devices are Certified as components for use only in other Certified equipment where the suitability of the combination is determined by CSA International.
 2. These devices are Certified for use in circuits where the power is limited by a transformer, rectifier, voltage divider, or a similar device (overload devices and fuses are excluded), and where the short circuit limit between conductors or between conductors and ground is 1500VA or less, and where a fire hazard will not result from a short circuit.
 3. HW series may be assembled by customer, As such, contact block(s), transformer (or direct adaptor), connecting unit, operator unit and lamp may be shipped separately.
- Switches, open type, spdt or dpdt. Illuminated or non-illuminated, Model LB-T with suffixes rated with suffix '1', '2' or '3', 0.1A, 125V ac (Res), with suffix '5', '6' or '7', 3A, 125V ac (Res) 5A, 250V ac (res), 3A, 250V ac (Res.), 2A, 250V ac (Res) 3A, 30V dc (res), 2A 30V dc Res, 0.4A, 125V dc (Res), 2A, 125V ac (Ind.), 1.5A, 250V ac (Ind.), 1A, 30V dc (Ind.), 0.2A, 125V dc (Ind.), with suffix '0', denoting no contacts, applicable lamp, max rating 30V ac or dc.



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| IDEC Corporation 6-64 Nishimiyahara 2-Chome, Yodogawa-Ku Osaka 532-0004 Japan | <u>3211-07</u> INDUSTRIAL CONTROL EQUIPMENT-Miscellaneous Apparatus | 021451_0_000 |
| Refer to Class Description for program details | | |



- Transformers for pilot lights, Types HW-R and HW-F, input rated 100 to 480 V, 50/60 Hz, Type HW-M, input rated 100 to 240 V, 50/60 Hz, for assembling with operator units, Type HW with suffixes and lamp.
- Pilot light without transformer, Type HW-P, input rated 6 to 120 V, applicable lamp rating, incandescent lamp 6.3, 18, 24 and 30 V, 1 W and LED lamp 6, 12, 24 and 120 V. LED lamps LSTD-H2, 220VAC, 2VA max and LSTD-M4, 240VAC, 3VA max.
- Pilot light without transformer, Type HW1P-5Q4 and HW1P-5Q7, input rated 24V ac/dc, applicable lamp rating, incandescent lamp, 28V, 0.17A and LED lamp, 24V.

Notes:

1. Open type devices are Certified as components for use only in other Certified types where the suitability of the combination is to be determined by CSA International.
 2. Suffix designations indicate mechanical variations.
 3. Barriers may be necessary in certain applications to insure proper spacing.
- Cam switches, Models ACSNO, ACSNK, UCSQO and UCSQM each rated 5A, 120V ac res; 3A, 240V ac, res; 2A, 480V ac res; 1A, 600V ac res; 8A, 24V dc; 3A, 110V dc; 1A, 220V dc; 0.4A, 440V dc; A600 and P600 pilot duty.
 - Switch units, open type, 1 or 2 pole, single throw (NC), Models HA-E with suffixes, rated 1.5 A, 250 V ac (Gen), 3 A, 250 V ac (Res), 0.22 A, 125 V dc (Res), 0.4 A, 125 V dc (Res).

Notes:

1. Series HJ1B switches have also been investigated to the requirements for safety interlock switch in accordance with C22.2 No 950-M except for 3 A, 50 V dc.
 2. Characters "*" and "+" indicate the switches with electrical ratings endurance tested for 100,000 cycles and 10,000 cycles of operations respectively.
 3. Open type devices are certified as components for use only in other certified equipment where the suitability of the combination is to be determined by the CSA International.
- Pilot lights, Models APW and CPQW, open type, without transformer 6 to 30 V ac/dc, 120VAC, 240VAC, with transformer 100 to 480 V.
 - Pushbutton monolever and selector type switch operator assemblies, Series TW, open type, consist of operator and/or pilot light (with or without pilot light transformer) and/or contact blocks.
 - Transformer, Series TW, TWS, HW-L and HW-T, open type for use with Series TW operator (illuminated pushbutton or selector switches) or pilot light, primary 100-480 V ac, secondary 6 to

7 V ac, 1 W.

- Contact block, Series TW and HW, open type, for use with Series TW and TWS switch operators, max rating 600 V ac, A600.
- Transformer, Series TWAR and TWAN, open type, for use with certified illuminated pushbuttons and pilot lights, LED lamps only, primary 100 to 480 V ac, 50/60 Hz, secondary 6-30 V dc.
- Direct Adoptors (without transformer), Types TW-DA1, TW-DA1F, HW-DA1 and HW-DA1F and HW-GA1 for use with illuminated type switches, Series TWD, TW and TWS Certified under LR 21451.

Notes:

1. Suffix letters and/or numbers are added to series designation indicate contact arrangement and mechanical variations.
2. Series TW transformers and assemblies using Series TW transformers are certified for use in equipment where the short circuit capacity of the circuit is limited by fuses having rating not exceeding the rating of the device.
3. Open type devices are certified as components for use only in other certified equipment, where the suitability of the combination is determined by CSA International.

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