



## Certification Record

Customer	Class	File Number
ASCO 50-60 Hanover Rd, Florham Park NJ 07932 USA	3228-01 VALVES-For Hazardous Locations	013976_0_000

ANY CATALOGUE NUMBERS DESCRIBED IN THIS CERTIFICATION RECORD MAY HAVE EITHER ONE OR TWO ZEROS EMBEDDED ANYWHERE BETWEEN FIRST AND LAST CHARACTER OF THE ORIGINAL CATALOGUE NUMBER. THE ZEROS ARE ONLY IN PLACE FOR CLIENTS TRACKING PURPOSES.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III, Encl. 3 or 4, intrinsically safe:

- "ASCO" Solenoid Valves, Series Nos IS8223, IS8262, IS8308, IS8314, IS8316, IS8317, IS8344, IS8345 and IS8408; intrinsically safe when connected to CSA Certified zener barriers, R. Stahl Inc., Model Nos 8901/31-280/085/00, 8901/30-280/085/00, 8901/33-273/000/00, 8901/34-273/000/00, 9001/01-280-085-10, 9001/00-280-085-10, 9001/03-280-000-10 and 9001/04-280-000-10 in accordance with Drawing FV-222-411.

Class I, Groups C and D; Class II, Groups E, F and G; Encl. 3 or 4, intrinsically safe:

- "ASCO" Solenoid Valves, Series Nos IS8223, IS8262, IS8308, IS8314, IS8316, IS8317, IS8344, IS8345 and IS8408; intrinsically safe when connected to CSA Certified zener barriers, R. Stahl Inc., Model Nos 8901/31-280/100/70, 8901/30-280/100/70, 8901/33-273/000/00, 8901/34-273/000/00, 9001/03-280-000-00, 9001/04-280-000-00, 9001/01-280-100-10, 9001/00-280-100-10, 9002/13-280/100-04, 9002/13/280/110/00, 9001/01/252/100/14 and 9001/00-252-100-14 MTL Inc. Measurement Technology, Ltd., Model Nos 787+, 787-, 728+, 728-, 4025, Pepperl & Fuchs, Inc., Model Nos Z129/EX, Z129/EX-CL, Z229/EX, Z229/EX-CL, Z478/EX, Z487/EX, Z479/EX, Elcon Instruments Inc., Model Nos 1871, 1872, MB4/2/16+, MB4/4/16+16+, in accordance with Drawing FV-222-411.

### Notes:

- Intrinsically safe solenoid valves, Series Nos "IS" with prefix "WP" or "WS", are Certified for CSA Encl. 3 or 4.
- No prefix and prefix "C" or "T" general purpose enclosure, and prefix "U" open frame (no enclosure) are not suitable for Class II or III.
- Prefix "K" or "KA" screw terminal coil, prefix "L" or "X" leads 18 in or greater and suffix "13790" green grounding conductor.
- Suffix "MF" general service to -40C, suffix "09376" slow closing construction, suffix "17626" or "17637" epoxy painted construction and suffix "17647" lower MOPD rating for mounting valve in any position.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Encl Types 3, 3S, 4, 4X, 6 or 6P (as applicable).

- "ASCO RED-HAT II" Solenoid Operated Shutoff and General Purpose Valves, Series Nos EF8030G, EF8040G, EF8210G, EF8215G, EF8220G\*\*, EF8221G, EF8223G, EF8262G, EF8263G\*\*, EF8314G, EF8316G, EF8317G, EF8320G, EF8321G, EF8327G\*\*\*, EF8342G, EF8344G, EF8345G.
- EFX8210G2 13244, 550V ac or 575V, 60Hz, 6.1W.
- EFX8210G22 13244, 575V, 60Hz, 6.1W.
- EFX8345G1 13244, 550V, 60Hz, 10.1W.
- EFX8210G9V 18824, 120V, 60Hz, 6.1W, 110V, 50Hz, 8.1W.
- HV-274-060-3, 24V dc, 22.6W.
- HV-274-060-4, 120V, 60Hz, 110V, 50Hz, 17.1W.
- HV-274-060-8, 24V dc, 9.0W.

- "ASCO RED-HAT II" Solenoid Operators, Cat Nos EF8200G1, EF8329G1, -G2, -G3, -G7, -G8 and -G9. All series and catalogue numbers above are not Certified for Group G when prefixed HT or HB or with M12 size solenoid rated 16.1W or 20.1W ac only.

Note: Class I, Groups B, C and D when Prefix JB, JC or JD is used denoting Model EP Junction Box Assembly.

\*\*\* - May contain the Prefix EV and the following suffixes: G41, G42, G43, G45, G51, G52, G53, G55.

- ASCO RED-HAT II Solenoid Operated Valves and General Purpose Valves, Dual Stage; Models HV270244-1; 120V, 60Hz, 110V, 50Hz, 14.00W; -2; Models HV270244-2; 240V, 60Hz, 220V, 50Hz, 14.00W; Models HV279205-1; 120V, 60Hz, 110V, 50Hz, 14.0W and Models HV279205-2; 240V, 60Hz, 220V, 50Hz, 14.0W.
- "ASCO RED-HATT II" Solenoid Operated Valves and General Purpose Valves, Models EF or EV8327G41, G42, G43, G45, G51, G52, G53, G55. Electrical ratings 24-480V, 50/60Hz, 12.0W ac 6-240V, 11.6W DC.
- "ASCO RED-HATT II" Solenoid Operated Valves and General Purpose Valves, Models EV8327G21, G22, G31, and G32. Electrical ratings 24-480V, 50/60Hz, 12.0W ac 6-240V, 11.6W DC.

Class I, Groups C and D; Class II, Groups E, F and G; Encl Types 3, 3S, 4, 4X, 6 or 6P (as applicable):

- "ASCO" solenoid valves, Bulletin Nos. 8015\*, 8025\*, EF8030, 8031, EF8037, 8037, 8041, 8044, EF8047, 8047, EF8210, 8211, EF8215\*\*\*, 8215\*\*\*, 8217, EF8220\*\*, 8220\*\*, EF8221, 8222\*\*, 8223, 8262, 8263\*\*, EF8264, 8264, EF8266, 8266, EF8267, 8267, 8292, EF8300, 8302, EF8308, 8309, EF8310, 8311, 8314, 8315, 8316, 8317, 8320, 8321, 8323, 8324, EF8340, 8340, EF8342, 8342, 8344, 8345, 8347, 8350\*, 8377, 8400, EF8408, 8409, EF8410, 8411.

Note: These "ASCO" solenoids valves meet the requirements for Single Seal marking per ANSI/ISA 12.27.01-2003 standard.

- "ASCO" solenoid valves Cat Nos:
- HV106-020, 24 to 480V, 50/60Hz, 6W.
- HV106-217, 48V dc, 19.7W
- HV106-248-1, 48V dc, 19.7W
- HV166-159, with or without suffixes "MO" or "MS", 24 through 480V, 50/60Hz, 9W.
- HV206-691, 24 to 480V, 50/60Hz, 11W.
- HV168-301, 24 to 480V, 50/60Hz, 11W.
- HV206-938, 24V dc, 9.7W.
- HV206-939, 24V dc, 9.7W.
- HV206-940, 24V dc, 16.8W.
- HV206-941, 24V dc, 16.8W.
- HV206-942, 24V dc, 11.2W.
- HV206-943, 24V dc, 23W.
- HV206-944, 24V dc, 35.1W.
- HV208-540-1, dual solenoid, 24 to 480V, 50/60Hz, 9W (sol. A) and 6W (sol. B).
- HV218-222-1, dual solenoid, 24 to 480V, 50/60Hz, 9W (sol. A) and 6W (sol. B).
- HV218-710-1, -2, -3, dual solenoid, 24 to 480V, 50/60Hz, 10.5W (sol. A and B).
- HV218-714-1, 120V, 60Hz, 16.7W.
- HV222-402-1, 24, 120, 240V, 50/60Hz, 9.95W.
- HV222-763-1, 24 to 480V, 50/60Hz, 6W.
- HV222-764-1, 24 to 480V, 50/60Hz, 6W.
- HV226-700-1, 24 to 240V, 60Hz, 9.95W.
- HV226-787-1, 24 to 480V, 60Hz, 15.05W.
- HV-256567-1, Dual Solenoid, 24V dc, 15.3W (Solenoid A and B).
- HV-262-976-1, 120V, 60Hz, 110V, 50Hz, 14.15W.
- HV-262-976-2, 240V, 60Hz, 220V, 50Hz, 14.15W.
- HV-270-244-1, 120V, 60Hz, 110V, 50Hz, 14.00W.
- HV-270-244-2, 240V, 60Hz, 220V, 50Hz, 14.00W.
- HV279455-1, 220/240V; 50/60Hz; 17.1W.
- X8031A7106298, 24-480V, 50/60Hz, 20W.
- X8031B57P10898, 120V, 60Hz, 20.9W, intermittent duty.
- FBX822012B15131, 24 to 480V ac, 50/60Hz, 16.7W.
- HTX8223A1313622, 24V dc, 16.8W.
- FTX8262B211V13420, 575V, 60Hz, 10.5W.

- 829212 and 829214, 24, 120 and 240V, 60Hz, 110 and 220V, 50Hz, 14.15W.
- HBX8302A81VF12275, 24-480V, 50/60Hz, 20W.
- X832064V09027, 24-480V, 50/60Hz, 6W.
- X8320A10613420, 550V, 60Hz, 15.4W.
- X83448313366, 24-480V, 50/60Hz, 6W.
- HBX8031A7106298, 24-480V, 50/60Hz, 20W.
- FBX8031B1307330, 24-480V, 50/60Hz, 16.7W.
- X8211C1213420, 550V, 50/60Hz, 11W.
- HTX8211C3313053, 24-480V, 50/60Hz, 10.5W.
- DPX8320A4212293, 110/220, 220/440V, 50Hz, 120/240, 240/480V, 60Hz, 16.7W.
- FBX8320A4212293, 24-480V, 50/60Hz, 16.7W.
- DFX8320A4212513, 110/220, 220, 440V, 50Hz, 120/240, 240/280V, 10.5W.
- BX8320A145VMB06136, 6-240V dc, 15.3W.
- FBX8320A145VMS06136, 6-240V dc, 15.3W.
- FBX8320A149VMS06136, 6-480V dc, 15.3W.
- X8320A14510510, 24-480V, 50/60Hz, 9W.
- DPX8320B212536, 110/220V, 220/440V, 50Hz and 120/240V, 240/480V, 9W.
- HVX166-15910510, 24-480V, 50/60Hz, 9W.
- DFX8345E1112225, 120/240V, 60Hz, 11W.
- FTX8345E12225, 120V, 60Hz, 11W.
- FTX8345E12225, 120V dc, 11.2W.
- "ASCO" solenoids, Cat Nos 80033, 80034, 80103, 80104, EFHP80141, EF80142, HP80143, 80144, 80163, 80164, EF80171, EF80172, 80173, 80174, 82022, 82024, 82026, 82028.

Note: "ASCO" solenoids, Cat Nos 80103 and 80104 meet the requirements for Single Seal marking per ANSI/ISA 12.27.01-2003 standard. marking per ANSI/ISA 12.27.01-2003 standard.

- Cat Nos 202-749-260562 and HV-268-439-1, 120V, 60Hz, 110V, 50Hz, 15.4W; 202-749-260563 and HV-268-439-2, 24V dc, 36.2W.
- "ASCO" solenoid operators, Cat Nos 82002, 8328, suffixes, 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40.
- Cat Nos HV-180-885-1, HV-180-886-1, 110/120V, 50/60Hz, 16.7W, HV-180-885-2, HV-180-886-2, 220/240V, 50/60Hz, 16.7W, HV-180-885-3, HV-180-886-3, 53V dc Int., 34.6W, HV-180-885-4, HV-180-886-4, 106V dc Int., 34.6W.

Class I, Groups A, B, C and D; Class II, Groups E, F, and G; Encls 3 and 4:

- "ASCO RED-HAT II" Solenoid, Cat Nos EF8016G1, EF8016G2, EF8003G1, EF8003G2, EF8003G9, , EV8003G1, EV8003G2, EV8003G9, EF8007G1, EF8007G2, EV8007G1, EV8007G2, EF8202G1, EF8202G3, EF8202G5 and EF8202G7.
- "ASCO" solenoid Cat No EF80041, rated 24, 110 and 220V ac at 50Hz, and 24, 120, 240V ac at 60Hz, 6.2W max; 6, 12, 24, 100, 110 and 120V dc, 7.0W max.
- "ASCO" Solenoid Cat No EF8004A1, rated 100, 110, 220, 240V ac at 50Hz; and 12, 24, 110, 120 and 240V ac at 60Hz, 6.3W max; 6, 12, 24, 48, 100 and 120V dc, 6.9W max.

Note: Class I, Groups B, C & D when Prefix JB, JC or JD is used.

- ASCO Solenoid Valve Cat No. HV287776-001, -002, -003 or -004, rated 12 Vdc with 72" leads, 24Vdc with 72" leads, 12 Vdc with 18" leads or 24 Vdc with 18" lead option, respectively. Class F coil and 4W, 35psi maximum operating pressure differential. Ambient Temperature: -45.6° C to 51.7° C. Single Seal.
- ASCO Solenoid Valve Cat No. HV285926-001, -002, -003 or -004, rated 12 Vdc with 72" leads, 24Vdc with 72" leads, 12 Vdc with 18" leads or 24 Vdc with 18" lead option, respectively. Class H coil and 12.1W, 35psi maximum operating pressure differential. Ambient Temperature: - 40°C to 51.7°C. Temperature Code T4A Single Seal.
- ASCO Solenoid Valve Cat No. HV298568001, 002, 003 and 004, rated 12Vdc with 72" leads, 24 Vdc with 72" leads, 12 Vdc with 18" leads or 24 Vdc with 18" lead option, respectively; 23.6 W (1 W with Peak and Hold). Class H coil, 35psi maximum operating pressure differential. Ambient Temperature: -40°C to 51.7°C. Temperature Code T3C. Single Seal.

Class I; Groups B, C and D; Class II, Groups E, F and G; -40°C to 80°C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JB" – ½ inch – 14 NPT Conduit Connection

"JD" – M20 X 1.5 6H Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups B, C and D; Class II, Groups E, F and G; -25°C to 80°C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JC" – ¾ inch – 14 NPT Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups, C and D; Class II, Groups E, F and G; -40°C to 80°C -Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JC" – ¾ inch – 14 NPT Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups B, C and D; Class II, Groups E, F and G; -40°C to 80°C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JB" – ½ inch – 14 NPT Conduit Connection

"JD" – M20 X 1.5 6H Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups B, C and D; Class II, Groups E, F and G; -25°C to 80°C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JC" – ¾ inch – 14 NPT Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups, C and D; Class II, Groups E, F and G; -40°C to 80°C -Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JC" – ¾ inch – 14 NPT Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups B, C and D; Class II, Groups E, F and G; 25° C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

- Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JB" – ½ inch – 14 NPT Conduit Connection

"JC" – ¾ inch – 14 NPT Conduit Connection

"JD" – M20 X 1.5 6H Conduit Connection

Note these are factory-installed accessories only.

Class I; Groups B, C and D; Class II, Groups E, F and G; 25° C to -40° C Ambient; Enclosure 3, 3S, 4, 4X, 6, 6P, 7 & 9

- Accessory Model EP Junction Box Accessory for use with selected RED HAT II™ solenoids. The prefix is added to Catalogue Numbers as follows:

"JB" – ½ inch – 14 NPT Conduit Connection

"JC" – ¾ inch – 14 NPT Conduit Connection

"JD" – M20 X 1.5 6H Conduit Connection

Note these are factory-installed accessories only.

Class I, Groups A, B, C and D; Class II, Groups E and F; Encl Type 3, 3S, 4, 4X, 6 or 6P (as applicable).

- "ASCO RED-HAT II" Solenoid, Cat Nos EFHT8016G1, EFHB8016G2, EFHT8003G1, EFHB8003G2, EFHT8007G1, EFHB8007G2, EFHT8202G1, EFHB8202G3, EFHT8202G5, EFHB8202G7, EVHT8003G1, EVHB8003G2, EVHT8007G1, EVHB8007G2, EF8017G1, EFHT8017G1, EF8017G2, EFHB8017G2, EF8014G1, EFHT8014G1, EF8014G2 and EFHB8014G2.

Note: Class I, Groups B, C & D when Prefix JB, JC or JD is used.

Class I, Groups A, B, C and D; Class II Groups E, F and G; Encls 3, 3S, 4, 4X, 6 or 6P (where applicable).

- "ASCO RED-HAT II" Solenoid, Cat Nos EV8003G1, EV8003G2, EV8003G9, EV8003G300, EF8003G300, EVMF8003G300, EFM8003G300, EV8003G301, EF8003G301, EVMF8003G301, EFM8003G301, EF8003G302, EV8003G302, FF8003G303, EV8003G303, EV800G71 and EV8007GT2.
- "ASCO RED-HAT II", Solenoid Valve Series, rated 20.1W max, 24-480V ac, 50 or 60Hz, Cat No EF8030G with suffix 17, 67, 70 and 71, EF8210F with suffix 26, 27, 54, 55, 56, 89, 13, 14, 18, 32, 103 and 104, EF8342G with suffix 1, 3, 701, 703, 20, 22, 720 and 722.

Class I, Groups B, C and D; Class II, Groups E, F and G; Encl. 3 and 4:

- "ASCO" solenoids, Cat Nos 80145, 80146, 80175 and 80176. Class I, Groups C and D; Class II, Groups E, F and G; Encl 3:
- "ASCO" solenoid operators, intermittent duty, Cat No HV-228-873-1, 120V, 60Hz, 128W; Cat No HV-228-873-2, 240V, 60Hz, 128W.

Class I, Groups C and D; Encl 3:

- "ASCO" Solenoid, Cat No HPX8018A508195, 24V dc, 56.5W.
- "ASCO" Solenoid, Cat No HV222-732-1, 120V, 60Hz, 41.4W.
- "ASCO" Solenoid, Cat No 8018A3, 24 to 480V, 60Hz, 28.2W.
- "ASCO" Solenoid, Cat No 8018A4, 24 to 240V dc, 35.1W. \*Must include prefix letters "EP" or "EF". \*\*Not listed for Group G when steam fluid temperatures exceed 120C (240F). \*\*\*Cat Nos EF8215A40, -A90, 8215A41, -A91, and -B94 not Certified for Class II, Groups E, F and G.

Notes:

1. Rating (except where otherwise indicated), 600V and less, 50/60Hz, and 500V dc and less, 65W and less.
2. Prefix and suffix letters and numbers are added to bulletin and catalogue numbers to indicate electrical and mechanical variations and accessories.
3. Solenoids and solenoid operators are Certified for use only in other equipment where the suitability of the combination is to be determined by the Canadian Standards Association.
4. Operating pressures, types of fluids and max temperatures are on file with CSA.
5. For valves with minor mechanical variations in addition to standard markings, the markings shall include the basic bulletin number, together with the CSA Monogram and file number LR 13976.
6. Manual reset valves may include suffix "SW" to denote addition of CSA Certified hazardous locations switch to indicate closed position of valve. With suffix "SW", valves are not suitable for "Encl. 4" use.
7. Cat No with prefix "CG" also have the designation "CGA 6.5". Cat Nos EF8210G3B, EF8210G75B, EF8210G76B, EF8210G94B, EF8210G95B, EF8210G105B, EF8210G106B, EF8215G10B, EF8215G20B, EF8215G30B, EF8262G210B, EF8262G232B and EF8263G206B also have the designation "CGA 3.9".
8. Solenoid valves, Cat Nos HV168-301, HV206-691, HV218-174-1, HV222-763-1, HV222-764-1, HV226-700-1, HV256567-1 and HV-262-976-1, -2, are optionally without the green ground wire. In which case, such valves are Certified only for use in other equipment, where the suitability of the final combination is to be determined by CSA or Inspection Authority having jurisdiction.
9. Solenoid valves Cat Nos 829212 and 829214 may have prefix "L" added to denote lead length of more than 18 in. Unless a grounding lead is provided, these solenoid valves are Certified only for use in other equipment, where the suitability of the final combination is to be determined by CSA or the Inspection Authority having jurisdiction.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Encl Type 3, 4 or 4X (as applicable):

- "ASCO" General Purpose Solenoid Valves Series aIS8223b, aIS8262320, aIS8314c, aIS8316d, aIS8317e, aIS8344f, aIS8345301; "ASCO" Solenoid Operator Series aIS8003g, intrinsically safe when connected to CSA Certified Zener Barriers R.  
Stahl Inc., Model Nos 9001/01-280-100-10; 9001/00-280-100-10, 9002/13-252-121-04, 9002/13-280-100-04, 9002/13-280-110-00, 9001/01-252-100-14 and 9001/00-252-100-14, Measurement Technology Ltd., Model Nos 787+, 787-, 728+, 728-, MTL2241, MTL2242, MTL3021, 708 and 707, Pepperl & Fuchs Mfg., (GB)Ltd., Model Nos Z478/EX, Z487/EX and Z479/EX, Elcon Instruments S.R.L. Model Nos 1871, 1872, MB4/2/16+ and MB4/4/4/16+16+ in accordance with ASCO Form NoV6850 or when connected to CSA Certified Zener Barrier rated 28V maximum, 300ohm minimum.

Class I, Groups A, B, C and D:

- "ASCO" General Purpose Solenoid Valves Series UIS8223b, UIS8262320, UIS8314c, UIS8316d, UIS8317e, UIS8344f, UIS8345301; "ASCO" Solenoid Operator Series UIS8003g, intrinsically safe when connected to CSA Certified Zener Barriers R.  
Stahl Inc., Model Nos 9001/01-280-100-10; 9001/00-280-100-10, 9002/13-252-121-04, 9002/13-280-100-04, 9002/13-280-110-00, 9001/01-252-100-14 and 9001/00-252-100-14, Measurement Technology Ltd., Model Nos 787+, 787-, 728+, 728-, MTL2241, MTL2242, MTL3021, 708 and 707, Pepperl & Fuchs Mfg., (GB)Ltd., Model Nos Z478/EX, Z487/EX and Z479/EX, Elcon Instruments S.R.L. Model Nos 1871, 1872, MB4/2/16+ and MB4/4/4/16+16+ in accordance with ASCO Form NoV6850 or when connected to CSA Certified Zener Barrier rated 28V maximum, 300ohm minimum.

Class I, Groups C and D; Class II, Groups E, F and G; Class III, Encl Type 3, 4 or 4X (as applicable):

- "ASCO" General Purpose Solenoid Valves Series aIS8223b, aIS8262320, aIS8314c, aIS8316d, aIS8317e, aIS8344f, aIS8345301; "ASCO" Solenoid Operator Series aIS8003g, intrinsically safe when connected to CSA Certified Zener Barrier Measurement Technology Ltd., Model No MTL3022 in accordance with ASCO Form NoV6850.

Class I, Groups C and D:

- "ASCO" General Purpose Solenoid Valves Series UIS8223b, UIS8262320, UIS8314c, UIS8316d, UIS8317e, UIS8344f, UIS8345301; "ASCO" Solenoid Operator Series UIS8003g, intrinsically safe when connected to CSA Certified Zener Barrier Measurement Technology Ltd., Model No MTL3022 in accordance with ASCO Form NoV6850.

Notes:

1.(a) Prefix "a" in the solenoid valve and/or solenoid operator Catalogue numbers represents the alpha characters corresponding to the solenoid enclosure types, as follows:

WP": Enclosure Type(s) 3 and 4;

"WS": Enclosure Type(s) 3, 4 and 4X;

(b) Prefix "U" in the solenoid valve and/or solenoid operator Catalogue numbers designates open type solenoid ( no enclosure configuration ).

2. Suffixes "b", "c", "d", "e" and "f" in the solenoid valve Catalogue numbers represent the following numerical characters (pertinent to valve body construction and process specifications): b = 303 or 323; c = 300 or 301; d = 334, 354, 364 or 374; e = 307 or 388; f = 344, 354, 356, 370, 372, 374, 376, 378, 380 or 382.

3. Suffix "g" in the solenoid operator Catalogue number represents the following numerical characters designating the type of operation:

- 300: 3-way;
- 301: 2-way.

4. Solenoid valves are consisting of solenoid operator assembly ( 2-way or 3-way ) combined with the applicable valve bodies/associated wetted parts.

5.(a) Solenoid Operators are Certified as Components only for use in other equipment where suitability of the combination is to be determined by the Authority having jurisdiction;

(b) Solenoid Valves/Operators with open type solenoid ( no enclosure configuration ) are Certified as Components only for installation in the suitable electrical enclosure and the combination is a subject of Acceptance by the Authority having jurisdiction.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Encl Type 3, 4 or 4X (as applicable):

- "ASCO" General Purpose Solenoid Valves Series a8223Abc, a8262A320cd, a8314Abc, a8316Abcd, a8317Abc, a8344Abcd, a8345A301c; "ASCO" Solenoid Operator Series a8003Ae, intrinsically safe when connected to CSA Certified Zener Barriers R.

Stahl Inc., Model Nos 9001/01-280-100-10; 9001/00-280-100-10,9002/13-252-121-04, 9002/13-280-100-04, 9002/13-280-110-00, 9001/01-252-100-14and 9001/00-252-100-14, Measurement Technology Ltd., Model Nos 787+, 787-,728+, 728-, MTL2241, MTL2242, MTL3021, 708 and 707, Pepperl & Fuchs Mfg., (GB)Ltd., Model Nos Z478/EX, Z487/EX and Z479/EX, Elcon Instruments S.R.L. ModelNos 1871,1872, MB4/2/16+ and MB4/4/4/16+16+ in accordance with ASCO Form NoV6969 or when connected to CSA Certified Zener Barrier rated 28V maximum, 300ohm minimum.

Class I, Groups A, B, C and D:

- "ASCO" General Purpose Solenoid Valves Series f8223Abc, f8262A320cd, f8314Abc,f8316Abcd, f8317Abc, f8344Abcd, f8345A301c; "ASCO" Solenoid Operator Series f8003Ae, intrinsically safe when connected to CSA Certified Zener Barriers R.

Stahl Inc., Model Nos 9001/01-280-100-10; 9001/00-280-100-10,9002/13-252-121-04, 9002/13-280-100-04, 9002/13-280-110-00, 9001/01-252-100-14and 9001/00-252-100-14, Measurement Technology Ltd., Model Nos 787+, 787-,728+, 728-, MTL2241, MTL2242, MTL3021, 708 and 707, Pepperl & Fuchs Mfg., (GB)Ltd., Model Nos Z478/EX, Z487/EX and Z479/EX, Elcon Instruments S.R.L. ModelNos 1871, 1872, MB4/2/16+ and MB4/4/4/16+16+ in accordance with ASCO Form NoV6969 or when connected to CSA Certified Zener Barrier rated 28V maximum, 300ohm minimum.

Class I, Groups C and D; Class II, Groups E, F and G; Class III, Encl Type 3, 4 or 4X (as applicable):

- "ASCO" General Purpose Solenoid Valves Series a8223Abc, a8262A320cd, a8314Abc,a8316Abcd, a8317Abc, a8344Abcd, a8345A301c; "ASCO" Solenoid Operator Seriesa8003Ae, intrinsically safe when connected to CSA Certified Zener Barrier Measurement Technology Ltd., Model No MTL3022 in accordance with ASCO Form NoV6969.

Class I, Groups C and D:

- "ASCO" General Purpose Solenoid Valves Series f8223Abc, f8262A320cd, f8314Abc, f8316Abcd, f8317Abc, f8344Abcd, f8345A301c; "ASCO" Solenoid Operator Series f8003Ae, intrinsically safe when connected to CSA Certified Zener Barrier Measurement Technology Ltd., Model No MTL3022 in accordance with ASCO Form No V6969.

Class I, Div. 2, Groups A, B, C and D:

- "ASCO" 300 WBEE Solenoid Valves Series a8223Abcd, a8262A320cd, a8314Abcd, a8316Abcd, a8317Abcd, a8344Abcd, a8345A301cd, Non-Incendive when connected with Non-Incendive Field Wiring parameters of  $V_{max} = 30V$ ;  $I_{max} = 100mA$ ;  $C_i = 0$ ;  $L_i = 0$ . Temp. Code T6,  $T_{amb} = 60$  °C. Encl Type 3, 3S, 4 or 4X.

Notes:

1. (a) Prefix "a" in the solenoid valve and/or solenoid operator Catalogue numbers represents the alpha characters corresponding to the solenoid enclosure types, as follows:

- "WPIS": Enclosure Type(s) 3 and 4;
- "WSIS": Enclosure Type(s) 3,4 and 4X;
- "WBIS": Enclosure Type(s) 3,4 and 4X;
- "WBEE": Enclosure Type(s) 3, 3S, 4, 4X.

(b) Prefix "f" in the solenoid valve and/or solenoid operator Catalogue numbers designates open type solenoid (no enclosure) - configurations "UIS" or "ISSC".

2. Suffixes "b", "c", "d" and "e" in the solenoid valve Catalogue numbers represent the following numerical characters (pertinent to valve body construction and process specifications):

b = Pipe and orifice size :

- 303 or 323 (8223 only);
- 300 or 301 (8314 only);
- 334, 354, 364 or 374 (8316 only);
- 307 or 308 (8317 only);
- 344, 354, 356, 370, 372, 374, 376, 378, 380 or 382 (8344 only).
- 302, 304, 305, 306, 309, 310, 313, 314, 317, 318, 319, 320, 321, 322, 365, 366, 367, 368, 381 or 386.

c = General service to -40 C (-40 F) - "MF" designator in the solenoid valve Catalogue number.

d = Mounting bracket and/or manual operator, designator "MB" and/or "MO" or no designator, if no mounting bracket or manual operator.

e = Operation:

- 300: 3-way;
- 301: 2-way.

3. Solenoid valves are consisting of solenoid operator assembly ( 2-way or 3-way ) combined with the applicable valve bodies/associated wetted parts.

4. (a) Solenoid Operators are Certified as Components only for use in other equipment where suitability of the combination is to be determined by the Authority having jurisdiction;

(b) Solenoid Valves/Operators with open type solenoid ( no enclosure configuration ) are Certified as Components only for installation in the suitable electrical enclosure and the combination is a subject of Acceptance by the Authority having jurisdiction.

5. Process data:

Medium: air or inert gas;

Maximum working pressure: 1035 kPa (150 psig);

Maximum fluid temperature: 60 C (140 F).

Ambient Temperature: -40 C to +60 C (-40 F to +140 F).

Class I, Groups C and D; Encl Type 4X:

- "ASCO RED HAT" General Purpose offshore service solenoid valve Cat Nos EF8317501, -511\*, EF8320501-505, -511\*, -515\*, 12 or 24V dc, 2.88W; EF8317502, -512\*, 12 or 24V dc, 1.44W. Note: \*Solenoid incorporates factory sealed leads.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III, Encl Types 3, 3S, 4, 4X, 6 or 6P (applicable):

- "ASCO RED-HAT" II" General purpose, low power solenoid valves Series Cat Nos, Cat Nos EF or EV, with or without MF, -8223Ge, -8262Gg, -8314Ga, -8316Gb, -8317Gc, -8344Gd, and -8345G301; Solenoid operator Series Cat Nos, Cat Nos EF or EV, with or without MF, -8003Gf.

Note: Class I, Groups B, C & D when Prefix JB, JC or JD is used.

Notes:

1. Solenoid valves and solenoid operator are consisting of solenoid coil assembly EF 238714-902 (24V dc) or -903 (12V dc) and (EV) 274714-902 (24V dc) or -903 (12V dc) 1.4 max, (EFMF 276006-004 (12V dc) or -006 (24V dc) and EVMF 276007-004 (12V dc) or -006 (24V dc), 1.7W max combined with the valve bodies/associated wetted parts as described in the corresponding report.
2. Suffix a = 300 or 301;  
Suffix b = 334, 354, 356, 364 or 374;  
Suffix c = 307 or 308;  
Suffix d = 344, 354, 356, 370, 372, 374, 376, 380 or 382;  
Suffix e = 303, 310 or 323;  
Suffix f = 300 (3-way) or 301 (2-way) operation.  
Suffix g = 320 or 386.
3. Solenoid operators are Certified as components only for use in other equipment where the suitability of the combination is to be determined by the Authority having jurisdiction.
4. Model EP Junction box accessory may be added as shown above by the Prefix option of JB, JC, JD.
5. Meets single seal requirements per ANSI/ISA 12.27.01 - Requirements for Process Sealing between Electrical Systems and Flammable or Combustible Process Fluids.

Class I, Div 1 and 2, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Types 3, 3S, 4, 4X, 6 or 6P (as applicable):

- "ASCO RED-HAT II" General purpose, Low Power Cartridge Valves and Solenoids Series Cat Nos EF or EV, with or without HT, with or without MF, Category Series 8314Ha, 8316Hb, 8316J374, 8317Hc, 8344Hd and 8551He; Solenoid Operator Series Cat Nos -8003Hf. Operating temperature -40°C to +65°C or +80°C. Temperature Code T6.

Notes:

1. The Product Data Sheet ASCO doc. PDS 8XXXH3XX-MXX describes the electrical and haz loc ratings of the Low Power Valves MX Coil.
2. Suffix a = 300 or 301;  
Suffix b = 301, 302, 303, 304, 381, 382, or 384;  
Suffix c = 307 or 308;  
Suffix d = 370, 372, 374, 376, or 378;  
Suffix e = 301, 302, 309, 310, 321 or 322;  
Suffix f = 304 (3-way) operation.
3. Solenoid Operators are Certified as Components only for use in other equipment where suitability of the combination is to be determined by the Authority having jurisdiction.
4. Model EP Junction box accessory may be added as shown by the prefix option of JB, JC or JD.



5. No manual operators when using natural gas, propane or manufactured gas (applies to all prefixes with 8414H3XX and 8262H3XX series only).

6. Meets single seal requirements per ANSI/ISA 12.27.01 - Requirements for Process Sealing between Electrical Systems and Flammable or Combustible Process Fluids.

Class I, Div. 1 and Div. 2, Groups A, B, C and D; Class II, Groups E, F and G; Class III

- "ASCO RED-HAT II" General purpose, Low Power Cartridge Valves and Solenoids, Intrinsically Safe Apparatus with entity parameters and Nonincendive Electrical Apparatus with Non-Incendive Field Wiring parameters per installation drawing V9605 & V9671. Maximum operating temperature +65°C. Temperature Code T6.

Entity Parameters/Non-incendive Parameters: Vmax = 32 V, Imax = 500 mA, Pi = 1.5 W, Ci = 0, Li = 0

Solenoid Valve Models a8262Bbcd, a8223Bbcd, a8314Bbcd, a8316Bbcd, a8317Bbcd, a8344Bbcd, 8551Bbcd, Solenoid Operator a8003B; a8003B304, a8003B305; Encl. Types 3, 3S, 4, 4X, 6 or 6P (as applicable), IP66 / IP67

Where:

a = Enclosure Types IS

b = Pipe and orifice size 320, 386 (8262 only), 303, 310, 323 (8223 only), 300 or 301 (8314 only), 301, 302, 303, 304, 374, 381, 382, 384 (8316 only), 307 or 308 (8317 only), 344, 354, 356, 370, 372, 374, 376, 378, 380, 382, (8344 only), 301, 302, 309, 310, 321, 322 (8551 only)

c = MF or none

d = MB, MO or none (all valve models). Additional suffix MI, MH, MS valid only for valve model a8551Bbcd.

Note: Meets single seal requirements per ANSI/ISA 12.27.01 - Requirements for Process Sealing between Electrical Systems and Flammable or Combustible Process Fluids.

Solenoid Valve Models a8262Bbcd, a8223Bbcd, a8314Bbcd, a8316Bbcd, a8317Bbcd, a8344Bbcd, 8551Bbcd, Solenoid Operator a8003B; a8003B304, a8003B305; Encl. Types 3, 3S, 4, 4X, (as applicable), IP45

Where:

a = Enclosure Types JIS

b = Pipe and orifice size 320, 386 (8262 only), 303, 310, 323 (8223 only), 300 or 301 (8314 only), 301, 302, 303, 304, 374, 381, 382, 384 (8316 only), 307 or 308 (8317 only), 344, 354, 356, 370, 372, 374, 376, 378, 380, 382, (8344 only), 301, 302, 309, 310, 321, 322 (8551 only)

c = MF or none

d = MB, MO or none (all valve models). Additional suffix MI, MH, MS valid only for valve model a8551Bbcd.

Solenoid Valve Models a8262Bbcd, a8223Bbcd, a8314Bbcd, a8316Bbcd, a8317Bbcd, a8344Bbcd, 8551Bbcd, Solenoid Operator a8003B, a8003B304, a8003B305

Where:

a = Enclosure Types ISV, /ISVT ISSC

b = Pipe and orifice size 320, 386 (8262 only), 303, 310, 323 (8223 only), 300 or 301 (8314 only), 301, 302, 303, 304, 374, 381, 382, 384 (8316 only), 307 or 308 (8317 only), 344, 354, 356, 370, 372, 374, 376, 378, 380, 382, (8344 only), 301, 302, 309, 310, 321, 322 (8551 only)

c = MF or none

d = MB, MO or none (all valve models). Additional suffix MI, MH, MS valid only for valve model a8551Bbcd.

**Solenoid Valve Models a8262Bbcd, a8223Bbcd, a8314Bbcd, a8316Bbcd, a8317Bbcd, a8344Bbcd, 8551Bbcd, Solenoid Operator a8003B, a8003B304, a8003B305; Encl. Types 3, 3S, 4, 4X, 6, 6P; IP66 / IP67**

Where:

a = Enclosure Types JPIS/JPETIS, JSIS/JSETIS

b = Pipe and orifice size 320, 386 (8262 only), 303, 310, 323 (8223 only), 300 or 301 (8314 only), 301, 302, 303, 304, 374, 381, 382, 384 (8316 only), 307 or 308 (8317 only), 344, 354, 356, 370, 372, 374, 376, 378, 380, 382, (8344 only), 301, 302, 309, 310, 321, 322 (8551 only)

c = MF or none

d = MB, MO or none (all valve models). Additional suffix MI, MH, MS valid only for valve model a8551Bbcd.

Class I, Groups A, B, C, and D; Class II, Groups E, F and G; Types 3, 3S, 4, 4X, 6 or 6P (as applicable):

- "ASCO RED-HAT II" General purpose, low power solenoid valves Series Cat Nos EF8040H (6,7,8); EF8210H (105B, 106B); EF345H3; EF8353G39.

Ex m IIC T3

- "ASCO RED-HAT® Next Generation Solenoid" - General purpose, low power solenoid valves Catalogue Numbers - EF8003P001, EF8007P001, EF8202P001, -005, EJ8003K001, J8007K001, EJ8202K001, EJ8202K005, EF8003K001, -002, -009, EF8007K001, EF8202K001, -003, -005, -007; 12 - 240V ac/dc; 50/60Hz for Ac units; rated. -40°C to max ambient of 75°C.

Ex m II, T4A (120° C):

- "ASCO RED-HAT® Next Generation (47) Solenoid" - Catalogue Numbers – EE8003P001, EE8007P001, EE8202P001, -005, rated 12-240Volts AC/DC, 50/60 Hz for AC; Rated. -40° C to max ambient of 60° C.
- Electrically operated valves "RED HAT" Next Generation (47), two ways valves Series 8030, 8210, 8221, 8262 and 8263, three way valves, Series 8314, 8316, 8317, 8320, 8321, 8344 and 8345 followed by P and two way or three way and reverse acting type solenoid operators Series 8003, 8007 and 8202 followed by P, rated 12-240 V dc and 24-240 V ac, 50/60Hz, 1.0 / 1.5 / 2 Watts, Class H insulation, 60° C ambient, 150-825 PSI, max for three way valves and two way or three way and reverse acting type solenoid operators, 2200 psi max. for two way valves.

Notes:

1. Models with the prefix "EE".
2. The Temperature Code is T4A (120° C) for the coil type P – "Premium".

Class I, Div 2, Groups A, B, C, and D; Class II, Div 2, Groups F and G; Class III; T4A (120° C); Encl. Types 3, 3S, 4 and 4X:

- "ASCO RED-HAT® Next Generation (47) Solenoid" - Catalogue Numbers – EE8003P001, EE8007P001, EE8202P001, -005, rated 12-240Volts AC/DC, 50/60 Hz for AC; Rated. -40° C to max ambient of 60° C.
- Electrically operated valves "RED HAT" Next Generation (47), two ways valves Series 8030, 8210, 8221, 8262 and 8263, three way valves, Series 8314, 8316, 8317, 8320, 8321, 8344 and 8345 followed by P and two way or three way and reverse acting type solenoid operators Series 8003, 8007 and 8202 followed by P, rated 12-240 V dc and 24-240 V ac, 50/60Hz, 1.0 / 1.5 / 2 Watts, Class H insulation, 60° C ambient 150-825 PSI, max for three way valves and two way or three way and reverse acting type solenoid operators, 2200 psi max. for two way valves.

Notes:

1. Models with the prefix "EE".
2. The Temperature Code is T4A (120° C) for the coil type P - "Premium".

Class I, Groups. A, B, C and D; Class II, Groups. E, F and G; Temp. Code T3C or T3B; Encl. Types 3, 3S, 4, 4X, 6 or 6P

- Two way normally closed PWM proportional modulating solenoid valves, models HV139068-004, HV139068-005, HV139068-007, HV139068-008, HV139068-009, HV139069-004, HV139074-005, HV139069-007, HV286528-001; HV430305-002, HV430305-003, HV430305-005, HV430305-006, HV430305-007, HV430306-002, HV430306-004, HV430307-002, HV431911-002, -003 and HV 430305-009 rated 24V dc, 12.8 W; Maximum operating pressure 50 psi, operating ambient -30°C to 70°C except for model HV286528-001, -30°C to 60°C.
- Two way normally closed direct acting solenoid valves, models HV290042-001 and HV290042-002; rated 110/220V ac, 50 Hz and 120/240V ac, 60 Hz; Maximum operating pressure 50 psi, operating ambient -13° C to 131° C.

Class I, Div 1, Groups A, B, C, and D; Class II, Div 1, Groups E, F, G; Class III; Encl. Type 3 and 4

- **PART A:** Electrically operated valves, Cat No's EF/EV 8262, EF/EV8263 Revision letter H Normally Closed Safety Shutoff and General Purpose rated 12-480V AC, 50/60Hz 6-240V DC. Max. ambient temperature 60°C (55° C for DC rated valves).
- **PART B:** ASCO RED HAT II solenoid, Cat No's EF8016H1, EF8016H2 and EF/EV8003H1, EF/EV8003H2 rated 12-480V AC, 6-240V DC. Min ambient -40°C. Max. ambient temperature 60°C (55°C for DC rated valves). Cat No's EF/EV8003H9 (Class F, 155°C), AC at 15.1W (ambient -40°C/F to 52°C/125F), Class F 155°C, DC at 11.6W, ambient -40°C/F to 55°C/131F and EF/EVHT8003H9 (Class H, 180°C) DC only 11.6W at -40°C/F to 55°C/131F ambient.

Notes:

1. All series and Cat. Nos. above are not Certified for Group G when prefixed HT or HB.

2. DC/H Cat. Nos. are Certified only for Class I, Div 1, Groups A, B, C, and D & Class II, Group E.
3. Cat No's 8263 Revision letter H not Certified for Group G when steam fluid temperature exceeds 120° C.
4. The Temperature Code is as follows:

Solenoid	Class	Temperature	Temp Code
MXX	F	165°C	T3B
MXX	H	180°C	T3A
M6	F	165°C	T3B
M6	H	180°C	T3A
Next Gen			T4A

Class I, Div 2, Groups A, B, C, and D; Class II, Div 2, Groups F and G; Class III; T4A (120° C); Encl. Types 3, 3S, 4 and 4X

PART A:

- Electrically operated valves, Cat No's 8262 and 8263 Revision letter R Series Normally Closed Safety Shutoff and General Purpose rated 12-240 V DC and 24-240 V AC, 50 / 60 Hz.
- Electrically operated valves, Cat No's 8262/8263 Revision letter R Series Normally Open General Purpose rated 12 - 240 V DC and 24 - 240 V AC, 50 / 60 Hz

PART B:

- ASCO RED-HAT® Next Generation (47) Solenoid" - Catalogue Numbers – EE8003R001, rated 12-240Volts AC/DC, 50/60 Hz for AC; Rated. –40° C to max ambient of 60° C.
- ASCO RED-HAT® Next Generation (47) Solenoid" - Catalogue Numbers – EE8202R005, rated 12-240Volts AC/DC, 50/60 Hz for AC; Rated. –40° C to max ambient of 60° C.

Electrically operated valves, 8314 H SERIES General Purpose rated 24-480V AC, 60Hz and 22-440 AC, 50Hz, and 6-240V DC. Max. ambient temperature 60°C (55°C for DC rated valves).

Class I, DIVISION 1, Groups A, B, C and D; Class II, Groups E, F and G.

- EF or EV, with or without P, with or without L, followed by 8314H006, H007, H008, H031, H032, H033, H034, H035, H036, H037, H038, H039, H040, H041, H042, H043, H044, H045, H049, H050, H051, H052, H053, H054, H055, H056, H057, H068, H069, H070, H120, H121, H122, H123, H124, H126, H127, H128, H129, H130, H131, H132, H133, H134, H135, H227, H228, H229, H230, H231, H232, H233, H234, H235 all with or without suffix NONE, V, N, NV, with or without SF, with or without MB, with or without MS.

Class I, DIVISION 1, Groups A, B, C and D; Class II, Group E.

- EF or EV, with HC or HT, with or without P, with or without L, followed by 8314H006, H007, H008, H031, H032, H033, H034, H035, H036, H037, H038, H039, H040, H041, H042, H043, H044, H045, H049, H050, H051, H052, H053, H054, H055, H056, H057, H068, H069, H070, H120, H121, H122, H123, H124, H126, H127, H128, H129, H130, H131, H132, H133, H134, H135, H227, H228, H229, H230, H231, H232, H233, H234, H235 all with or without suffix NONE, V, N, NV, with or without SF, with or without MB, with or without MS.

Class I, DIVISION 1, Groups B, C and D; Class II, Group E, F and G.

- JB, JC or JD, with EF or EV, with or without P, followed by 8314H006, H007, H008, H031, H032, H033, H034, H035, H036, H037, H038, H039, H040, H041, H042, H043, H044, H045, H049, H050, H051, H052, H053, H054, H055, H056, H057, H068, H069, H070, H120, H121, H122, H123, H124, H126, all with or without suffix NONE, V, N, NV, with or without SF, with or without MB, with or without MS.

Class I, DIVISION 1, Groups B, C and D; Class II, Group E

- JB, JC or JD, with EF or EV, with HC or HT, with or without P, followed by 8314H006, H007, H008, H031, H032, H033, H034, H035, H036, H037, H038, H039, H040, H041, H042, H043, H044, H045, H049, H050,

H051, H052, H053, H054, H055, H056, H057, H068, H069, H070, H120, H121, H122, H123, H124, H126 , all with or without suffix NONE, V, N, NV, with or without SF, with or without MB, with or without MS

Electrically operated valves, 8314 R SERIES General Purpose rated 24-240V AC, 50/60Hz and 12-240 V DC. Max. ambient temperature 60°C.

Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G.

- EE with or without L, followed by 8314R006, R007, R008, R031, R032, R033, R034, R035, R036, R037, R038, R039, R040, R041, R042, R044, R045, R049, R050, R051, R052, R053, R054, R055, R056, R057, R068, R069, R070, R120, R121, R122, R123, R124, R126, R0127, R0128, R129, R130, R131, R132, R133, R134, R135, R227, R228, R229, R230, R231, R232, R233, R234, R235, 8314R035, R036, R121, R126, with or without suffix NONE, V, N, NV, with or without SF, with or without MB, with or without MS.

Solenoids rated 24-480V AC, 60Hz and 22-440 AC, 50Hz, and 6-240V DC. Ambient temperatures -40°C to 60°C (55°C for DC rated valves).

Class I, Groups A, B, C and D; Class II, Groups E, F and G.

- EF or EV, with or without P, with or without L, followed by 8007H001, H002.

Class I, Groups A, B, C and D; Class II, Group E.

- EF or EV, with HC or HT, with or without P, with or without L, followed by 8007H001, H002.

Class I, Groups B, C and D; Class II, Group E, F and G.

- JB, JC or JD, with EF or EV, with or without P, followed by 8007H001, H002.

Class I, Groups B, C and D; Class II, Group E

- JB, JC or JD, with EF or EV, with HC or HT, with or without P, followed by 8007H001, H002.

Solenoids rated 24-240V AC, 50/60Hz and 12-240 V DC. Ambient temperatures -40°C to 60°C.

Class I, Division 2, Groups A, B, C, and D; CLASS II, Division 2, Groups F and G.

- EE with or without L, followed by 8007R001.

**Note:** The Temperature Code is as follows:

<u>Solenoid</u>	<u>Class</u>	<u>Ambient Temperature</u>	<u>Temp Code</u>
AC	F	52°C	T3B
AC	H	60°C	T3A
DC	F	55°C	T3B
DC	H	55°C	T3A

Class I, Div 1, Groups A, B, C, and D; Class II, Div 1, Groups E, F, G

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.

2. Suffixes can be None or V or A, with or without N or SF, with or without VM or VH, with or without MB.

3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB, with or without MS.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART C:** Fuel Gas Electrically operated Safety valves, Cat No's 8262H077 and 8262H078. MXX coils rated 10.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be None or A, with or without SF, with or without MB
  - **PART D:** Liquid Propane Electrically operated Safety valves, Cat No's 8262H110, H112, H114, H184, H185, H187, H188, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be B with or without MB, with or without SF..
  - **PART E:** Ammonia Electrically operated General Purpose valves, Cat No's 8262H174, H178, H183, H185, H187, H188, H230, and 8263H191, H193, H332, H333. MXX coils rated 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be NH, with or without MB, with or without MS.
  - **PART F:** Dry Air Electrically operated Safety valves, Cat No's 8262H108, H109, H110, -H112, H114, H182, H183, H184, H185, H187, H188, H189, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be P with or without V or A, with or without VM or VH, with or without MB, with or without SF.
  - **PART G:** Long Life (AC) standard class F Electrically operated General Purpose valves, Cat No's 8262H077, H108, H177, H179, H182, H184, H189, H202, H208, H210, H220, H226, H232 and 8263H124, H125, H190, H195, H197, H200, H232, H331. MXX coils standard Class F rated 15.1W, 24-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

**Notes:**

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be Q with or without V or A or E or J, with or without N or SF, with or without VM or VH, with or without MB.

**Class I, Div 1, Groups A, B, C, and D; Class II, Div 1, Groups E**

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz (with HB or HT), or 11.6W or 22.6W, 6-240VDC (w/o HB or HT); Rated ambient . -40°C to 60°C(AC) or 55°C (DC).

**Notes:**

1. Prefixes can be EF or EV, with HB or HT (AC only), with or without P, with or without L.
2. Suffixes can be None or V or A, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332,

-H333. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz (with HB or HT), or 11.6W or 22.6W, 6-240VDC (w/o HB or HT) ; Rated ambient . -40°C to 60°C(AC) or 55°C (DC).

Notes:

1. Prefixes can be EF or EV, with HB or HT (AC only), with or without P, with or without L.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB, with or without MS.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART C:** Fuel Gas Electrically operated Safety valves, Cat No's 8262H077 and 8262H078. MXX coils rated 10.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EF or EV, with HT, with or without P, with or without L.
2. Suffixes can be None or A, with or without SF, with or without MB.
  - **PART D:** Steam and Hot Water Electrically operated General Purpose valves, Cat No's 8263H300, H301, H303, H304, H306, H308, H318, H319, H320, and H321. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 55°C.

Notes:

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be None or E, with or without MB.
  - **PART E:** Liquid Propane Electrically operated Safety valves, Cat No's 8262H110, H112, H114, H184, H185, H187, H188, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EF or EV, with HB or HT, with or without P, with or without L.
2. Suffixes can be B with or without MB with or without SF
  - **PART E:** Ammonia Electrically operated General Purpose valves, Cat No's 8262H174, H178, H183, H185, H187, H188, H230, and 8263H191, H193, H332, H333. MXX coils coils rated 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EF or EV, with HB , with or without P, with or without L.
2. Suffixes can be NH, with or without MB, with or without MS.
  - **PART G:** Dry Air Electrically operated Safety valves, Cat No's 8262H108, H109, H110,-H112, H114, H182, H183, H184, H185, H187, H188, H189, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be P with or without V or A, with or without VM or VH, with or without MB, with or without SF.
  - **PART H:** Long Life (DC) standard class F Electrically operated General Purpose valves, Cat No's 8262H077, H108, H177, H179, H182, H184, H189, H202, H208, H210, H220, H226, H232 and 8263H124, H125, H190, H195, H197, H200, H232, H331. MXX coils standard Class H rated 11.6W, 6-240V DC; Rated ambient -40°C to 55°C.

Notes:

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be Q with or without V or A or E or J, with or without N or SF, with or without VM or VH, with or without MB.

Class I, Div 1, Groups B, C, and D; Class II, Div 1, Groups E, F, G

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be None or V or A, with or without N or SF, with or without VM or VH, with or without MB.

3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB, with or without MS.

3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART C:** Fuel Gas Electrically operated Safety valves, Cat No's 8262H077 and 8262H078. MXX coils 10.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be None or A, with or without SF, with or without MB.

- **PART D:** Liquid Propane Electrically operated Safety valves, Cat No's 8262H110, H112, H114, H184, H185, H187, H188, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be B with or without MB with or without SF.

- **PART E:** Ammonia Electrically operated General Purpose valves, Cat No's 8262H174, H178, H183, H185, H187, H188, H230, and 8263H191, H193, H332, H333. MXX coils coils rated 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be NH, with or without MB, with or without MS.

- **PART F:** Dry Air Electrically operated Safety valves, Cat No's 8262H108, H109, H110, -H112, H114, H182, H183, H184, H185, H187, H188, H189, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be P with or without V or A, with or without VM or VH, with or without MB, with or without SF.

- **PART G:** Long Life (AC) standard class F Electrically operated General Purpose valves, Cat No's 8262H077, H108, H177, H179, H182, H184, H189, H202, H208, H210, H220, H226, H232 and 8263H124, H125, H190, H195, H197, H200, H232, H331. MXX coils standard Class F rated 15.1W, 24-480V AC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.

2. Suffixes can be Q with or without V or A or E or J, with or without N or SF, with or without VM or VH, with or without MB.

Class I, Div 1, Groups B, C, and D; Class II, Div 1, Groups E

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 11.6W or 22.6W, 6-240V DC (w/o HB or HT); Rated ambient -40°C to 60°C (AC) or 55°C (DC).

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT (AC only), with or without P.

2. Suffixes can be None or V or A, with or without N or SF, with or without VM or VH, with or without MB

3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H089, -H099\*, -H105, -H107\*, -H108, -H109, -H110, -H112, -H114, -H174, -H175\*, -H176, -H177, -H178, -H179, -H181, -H182, -H183, -H184, -H185, -H187, -H188, -H189, -H200\*, -H202, -H208, -H210, -H212, -H214\*, -H220, -H226, -H230, -H232, -H277 and 8263H115, -H118, -H124, -H125, -H190, -H191, -H193, -H195, -H197, -H200, -H206, -H210, -H232, -H331, -H332, -H333. MXX coils rated 10.1W or 17.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 11.6W or 22.6W, 6-240V DC (w/o HB or HT); Rated ambient -40°C to 60°C (AC) or 55°C (DC).

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT (AC only), with or without P.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB, with or without MS.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART C:** Fuel Gas Electrically operated Safety valves, Cat No's 8262H077 and 8262H078. MXX coils 10.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HT, with or without P.
2. Suffixes can be None or A, with or without SF, with or without MB.
  - **PART D:** Steam and Hot Water Electrically operated General Purpose valves, Cat No's 8263H300, H301, H303, H304, H306, H308, H318, H319, H320, and H321. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 55°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.
2. Suffixes can be None or E, with or without MB.
  - **PART E:** Liquid Propane Electrically operated Safety valves, Cat No's 8262H110, H112, H114, H184, H185, H187, H188, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT, with or without P.
2. Suffixes can be B with or without MB with or without SF
  - **PART F:** Ammonia Electrically operated General Purpose valves, Cat No's 8262H174, H178, H183, H185, H187, H188, H230, and 8263H191, H193, H332, H333. MXX coils coils rated 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB, with or without P.
2. Suffixes can be NH, with or without MB, with or without MS.
  - **PART G:** Dry Air Electrically operated Safety valves, Cat No's 8262H108, H109, H110, -H112, H114, H182, H183, H184, H185, H187, H188, H189, H202, H208, H210, H212, H220, H226, H230, H232. MXX coils coils rated 10.1W or 17.1W, 12-480V AC, 50/60 Hz; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT, with or without P.
2. Suffixes can be P with or without V or A, with or without VM or VH, with or without MB, with or without SF.
  - **PART H:** Long Life (DC) standard class F Electrically operated General Purpose valves, Cat No's 8262H077, H108, H177, H179, H182, H184, H189, H202, H208, H210, H220, H226, H232 and 8263H124, H125, H190, H195, H197, H200, H232, H331. MXX coils standard Class F rated 11.6W, 6-240V DC; Rated ambient -40°C to 55°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.
2. Suffixes can be Q with or without V or A or E or J, with or without N or SF, with or without VM or VH, with or without MB.

Class I, Div 2, Groups B, C, and D; Class II, Div 2, Groups F, G

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262R107\*, -R109, -R181\*, -R183, -R185, -R202, -R208, -R212, -R220, -R226, -R230, -R232, -R099, -R105, -R174, -R175, -R178, -R277 and 8263R115, -R124,



-R191, -R193, -R200, -R210, -R332, -R333. RHNG coils rated 2.0W, 24-240VAC, 50/60 Hz or 12-240V DC; Rated. -40°C to max ambient of 60°C.

Notes:

1. Prefixes can be EE with or without L.
2. Suffixes can be None or V or A, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262R107\*, -R109, -R181\*, -R183, -R185, -R202, -R208, -R212, -R220, -R226, -R230, -R232, -R099, -R105, -R174, -R175, -R178, -R277 and 8263R115, -R124, -R191, -R193, -R200, -R210, -R332, -R333. RHNG coils rated 2.0W, 24-240VAC, 50/60 Hz or 12-240V DC; Rated. -40°C to max ambient of 60°C.

Notes:

1. Prefixes can be EE with or without L.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB, with or without MS.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART C:** Fuel Gas Electrically operated Safety valves, Cat No's 8262R077 and 8262R078. RHNG coils rated 2.0W, 24-240VAC, 50/60 Hz or 12-240V DC; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EE with or without L.
2. Suffixes can be None or A, with or without SF, with or without MB
  - **PART D:** Ammonia Electrically operated General Purpose valves, Cat No's 8262R174, R178, R183, R185, 187, R188, R230, and 8263R191, R193, R332, R333. RHNG coils rated 2.0W, 24-240VAC, 50/60 Hz or 12-240V DC; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EE with or without L.
2. Suffixes can be NH, with or without MB, with or without MS
  - **PART E:** Dry Air Electrically operated Safety valves, Cat No's 8262R108, R109, R110, -R112, R114, R182, R183, R184, R185, R187, R188, R189, R202, R208, R210, R212, R220, R226, R230, R232. RHNG coils rated 2.0W, 24-240VAC, 50/60 Hz or 12-240V DC; Rated ambient -40°C to 60°C.

Notes:

1. Prefixes can be EE with or without L.
  2. Suffixes can be P with or without V or A, with or without VM or VH, with or without MB, with or without SF
- Class I, Div 1, Groups A, B, C, and D; Class II, Div 1, Groups E, F, and G
- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be EF or EV, with or without P, with or without L.
2. Suffixes can be None or V, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.
  - **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be EF or EV, with or without P, with or without L.
  2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB.
  3. Cat. No. items with \* do not have suffix N, VM, VH options
- Class I, Div 1, Groups A, B, C, and D; Class II, Div 1, Groups E
- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090,

-H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 10.6W or 18.6W, 6-240VDC (w/o HB or HT); Rated ambient -40°C to 55°C (DC) or 60°C (AC).

Notes:

1. Prefixes can be EF EF or EV, with HB or HT (AC only), with or without P, with or without L.
2. Suffixes can be None or V, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 10.6W or 18.6W, 6-240VDC (w/o HB or HT); Rated ambient -40°C to 55°C (DC) or 60°C (AC).

Notes:

1. Prefixes can be EF EF or EV, with HB or HT (AC only), with or without P, with or without L.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

Class I, Div 1, Groups B, C, and D; Class II, Div 1, Groups E, F, G

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.
2. Suffixes can be None or V, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz; Rated ambient -40°C to 52°C.

Notes:

1. Prefixes can be JB or JC, with EF or EV, with or without P.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

Class I, Div 1, Groups B, C, and D; Class II, Div 1, Groups E

- **PART A:** General Service Electrically operated Safety valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 10.6W or 18.6W, 6-240VDC (w/o HB or HT); Rated ambient -40°C to 55°C (DC) or 60°C (AC).

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT (AC only), with or without P.
2. Suffixes can be None or V, with or without N or SF, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

- **PART B:** General Service Electrically operated General Purpose valves, Cat No's 8262H001, -H002, -H006, -H007, -H011, -H012, -H013, -H014, -H015, -H016, -H019, -H020, -H021, -H022, -H023, -H036, -H038, -H079\*, -H080, -H086, -H090, -H096\*, -H106\*, -H111, -H113, -H173\*, -H180\*, -H186 and 8263H002, -H003, -H054, -H116, -H117, -H119, -H192, -H194, -H196, -H330. M6 coils rated 6.1/8.1W or 9.1/11.1W, 12-480VAC, 50/60 Hz (with HB or HT) or 10.6W or 18.6W, 6-240VDC (w/o HB or HT); Rated ambient -40°C to 55°C (DC) or 60°C (AC).

Notes:

1. Prefixes can be JB or JC, with EF or EV, with HB or HT (AC only), with or without P.
2. Suffixes can be T or E or J or W with or without SF or N, with or without VM or VH, with or without MB.
3. Cat. No. items with \* do not have suffix N, VM, VH options.

Class I, Groups C and D; Class II, Groups E, F and G

- ASCO Solenoid Valve Cat. No. HV432656001, rated 24 Vdc, with 18" leads, 14.9 WATT, Class B, 5 psi, maximum operating pressure differential. Ambient Temperature: -40°C to 25°C. Fluid Temperature -40°C to 25°C. Temperature Code T3C (160 °C). Single Seal. Encls 1, 3 and 4.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Enclosure Types 3, 3S, 4, 4X, 6 or 6P (where applicable).

"ASCO RED-HAT II" Solenoid Catalogue Numbers

EF8003G300, EF8003G301, EF8003G302, EF8003G303, EF8003G1, EF8003G2, EF8003G9, EF8003G11

EF8007G1, EF8007G2

EF8014G1, EF8014G2

EF8017G1, EF8017G2

EFHT8003G1, EFHB8003G2, EFHT8003G11, EFHBG8003G12, EFHF8003G13

EFHT8007G1, EFHB8007G2

EFHB8014G2

EFHB8017G2

EFHT8014G1

EFHT8017G1

EFMF8003G300, EFMF8003G301

EV8003G1, EV8003G2, EV8003G300, EV8003G301, EV8003G302, EV8003G303, EV8003G9, EV8003G11

EV8007G1, EV8007G2

EVHB8003G2

EVHB8007G2

EVHT8003G1, EVHT8003G11, EVHB8003G12, EVHF8003G13

EVHT8007G1

EVMF8003G300

EVMF8003G301

"ASCO RED-HAT II", M12 Solenoid Valve Series

Rated 20.1 watts max, 24 - 480 Volts AC, 50 or 60 Hertz.

Catalogue Number EF8030G with suffixes 17, 67, 70 or 71;

Catalogue Number EF8210G with suffixes 13, 14, 18, 26, 27, 32, 54, 55, 56, 89, 103 or 104;

Catalogue Number EF8342G with suffixes 1, 3, 20, 22, 701, 703, 720 or, 722.

"ASCO RED-HAT II", MXX Solenoid Valve

Rated 10.1 watts max, 110 - 120 Volts AC, 50 or 60 Hertz.

Catalogue Number HV425285001;

**Notes:**

1. Max Body Rated Pressure: 250 Psi
2. Max Ambient Temperature: 52 °C (125°F)
3. Min Ambient Temperature: 0°C (32°F)
4. Max Fluid Temperature: 79.4°C (175°F)
5. Min Fluid Temperature: 0°C (32°F)
6. Temp code T3B (165°C)
7. Single Seal

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III, Encl 3, 3S and 4, 4X, 6, 6P, 7 and 9 (where applicable).

"Asco Red-Hat II" solenoid operated shut off and general purpose valves series Cat Nos EF8030G, EF8040G, EF8210G, EF8215G, EF8220G\*\*, EF8221G, EF8223G, EF8262G, EF8263G\*\*, EF8314G, EF8317G, EF8320G, EF8321G, EF8344G, EF8345G.

"Asco Red-Hat II" solenoid operators, Cat Nos EF8200G1, EF8329G1, -G2, -G3, -G7, -G8 and -G9. All series and cat nos above are not Certified for Group G when prefixed HT or HB.

"Asco Red-Hat II" solenoid, Cat Nos EF8016G1, EF8016G2, EF8003G1, EF8003G2, EF8202G1, EF8202G3, EF8202G5, and EF8202G7. Cat. No. EF8003G11.

Class I, Groups A, B, C and D; Class II, Groups E and F; Encl 3, 3S and 4, 4X, 6, 6P, 7 and 9 (where applicable).

"Asco Red-Hat II" solenoid, Cat Nos EFHT8016G1, EFHB8016G2, EFHT8003G1, EFHB8003G2, EFHT8202G1, EFHB8202G3, EFHT8202G5, and EFHB8202G7. Cat. Nos. EFHT8003G11, EFHB8003G12 and EFHF8003G13.

Class I, Groups B, C and D; Class II, Groups E F and G; Encl 3, 3S and 4, 4X, 6, 6P, 7\* and 9\*

"Asco Red-Hat II" solenoid Cat. Nos. JB or JC, with EF, with or without P, with or without L, followed by 8003G11.

Class I, Groups B, C and D; Class II, Groups E and F; Encl 3, 3S and 4, 4X, 6, 6P, 7\* and 9\*.

Cat. Nos. Nos. JB, or JC, JD with EF with or without P, follow by HT, with or without L, followed by 8003G11.

Cat. Nos. Nos. JB, JC, or JD with EF with or without P, follow by HB, with or without L, followed by 8003G12.

Cat. Nos. Nos. JB, JC, or JD with EF with or without P, follow by HF, with or without L, followed by 8003G13.

\* Note: Gas and Dust groups as shown

\*\* Note: Not listed for Group G when steam fluid temperature exceed 120°C (240°F).

Ratings for the EF and EV Series Solenoids:

Cat No. (+)	Wattage Rating		
	50Hz (++)	60Hz (++)	DC (+++)
EV8003G1, EVHT8003G1	10.1	10.1	11.6
EV8003G2, EVHB8003G2	17.1	17.1	22.6
EF8003G9, EV8003G9	15.1	15.1	-
EV8003G300, EF8003G300	-	-	1.4
EV8003G301, EF8003G301	-	-	1.4
EV8003G302, EF8003G302	-	-	1.8
EV8003G303, EF8003G303	-	-	1.8
EFMF8003G300 or EVMF8003G300	-	-	1.7
EFMF8003G301 or EVMF8003G301	-	-	1.7
EF8007G1	10.1	10.1	11.6
EV8007G1, EVHT8007G1	10.1	10.1	11.6
EF8007G2	17.1	17.1	22.6
EV8007G2, EVHB8007G2	17.1	17.1	22.6
EF8014G1	16.1	16.1	-
EFHT8014G1	16.1	16.1	-
EF8014G2	20.1	20.1	-
EFHB8014G2	20.1	20.1	-
EF8017G1	16.1	16.1	-
EFHT8017G1	16.1	16.1	-
EF8017G2	20.1	20.1	-
EFHB8017G2	20.1	20.1	-
EF8003G11	12.0	12.0	11.6
EFHT8003G11	-	-	11.6
EFHB8003G12	-	-	22.6
EFHF8003G13	-	-	15.6

Notes:

(+)	-	Catalogue numbers may also include L, P or PL after EF, EFHB and EFHT or EV, EVHB and EVHT.
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(++)	-	12, 24, 48, 120, 208, 240, or 480V ac, 60 Hz and 24, 110, 220, or 440V ac, 50Hz.
	-	24 through 480V ac, 50 or 60 Hz for catalogue number EF8003G9.
(+++)	-	6, 12, 24, 120 or 240V dc.
	-	Only 12 and 24V dc for catalogue numbers EF8003G300, EFMF8003G300, EF8003G301 and EFMF8003G301.

/rm