



Certification Record

CUSTOMER	CLASS	FILE
Mercoid Division Dwyer Instruments, Incorporated 102 Indiana Hwy 212, Michigan City IN 46361 USA	3211-03 INDUSTRIAL CONTROL EQUIPMENT-Motor Controllers - Auxiliary Devices Refer to Class Description for program details	068114_0_000

Controls incorporating one or more hermetically-sealed mercury tube switches; for electrical ratings see "Ratings" below, unless otherwise listed.

"Mercoid" pressure switches ("D" Series):

- Types D-20, -30, -40, -50, -60, -80, -920 with or without Suffix Nos -1 to -5, -7, -9, -25, -36, -51, -52, -54, -55, -57, -101, -102, -103, -106, -112, -113, -116 to -118, -125, to -130, -136, -137, -140 to -142, -150 to -162, -166, -170, -172, -700 to -735, -737, -738, -740, -741, -743, -744, -746, -747, -804, -815 or -816.
- Types D-220, -230, -240, -250, -260, -280, with or without Suffixes -2 or -3.
- Types D-420, -430, -440, -450, -460, -480 with Suffixes -4122, -4123, -4129 or -4132.
- Types D-520, -530, -540, -550, -560, -580 with or without Suffixes -2 or -3.

Note: In addition to the suffixes noted the type number may contain additional letters, A, B, F, L, P, R, S, U, W or X, and the zero may be by 1, 2, 3 or 4 to form model numbers denoting special features (e.g. Series D-20, a typical model number is DR-21-3L, or DXAW-23-103). Prefix N3 denotes Encls. 2 and 3, Prefix C4 denotes Encls. 4 and 5. (Note: Suffix P above refers to differential pressure Series - "DP"). Pressure switches (miscellaneous):

- Types PQ, PPQ, CP, CV, CPVw with or without Suffix W and/or -2, -3, -4122, -4123, -4129, -4132.
- Types AG, AGR, AGD, AK, AKR, AKD, AP, AP-41, AP-S, AP-S-41, APD, APD-41, APD-S, APD-S-41, APF, APW, APW41, APDW, APDW41, ASW, ASDW, APR, APR-41, AS, AS-S, ASD, ASD-S, ASR; with Suffixes -2, -3, -4, -26, -36, -54 or -153, -804, -7021, -7041.
- Types D-7020, 7220, D-7030, -7230, D-7040, D-7240, D-7050, D-7250, D-7060, D-7260, D7080, D7280, D-7920, D-72920 with Suffixes -153 or -804, with or without Suffix B.

Notes:

1. Skeleton-type switches are Certified only as components for use in other Certified equipment.
2. Types AGR, APR, APR-41, ASR have further Suffixes -L or -U. Types PG, PR, PRL, with or without Suffix W, with or without Suffixes -2, -2P, -3, -3P, -4, -54, -103, -105, 127, -129, -152 or -153, -156, -158 or -161. Types BB-221, -421, -521, with or without Suffix WP, and/or -2, -3, -

4122, -4123, -4129, -4132, -4133, -4134. Relays:

- Types V2, V3 transformer type relays.
- Types V2X108, V3-729-159 alarm relays.
- Type W-6 solenoid type relays.
- Type W-20 plunger type relays, 120/240/277/440V ac, 30/20/20/10A; 120/240V dc, 15/10A; 120/240/277/550V ac, 35/30/30/6A (non-ind.); 120V ac, 30A (tungsten lamp load); 120/240V ac, 2 hp.

Notes:

1. Skeleton-type relays are Certified only for use in other equipment where the suitability of the combination is to be determined by the Canadian Standards Association.
2. Various suffix numbers and letters may be used to denote special features, switch used, etc. Miscellaneous controls*:

- Types 46, 47, 47SR lever arm controls.
- Types 40, 41, 49, 49SR float controls.
- Types 75, 75K, 75KK, 125 liquid level controls.
- Types 175, 301, 401-1, 401-2, 401-3, 401-4, A190, B190, 195-4, 195-6 and 195--7 liquid level controls, open type.
- Types 201, 203, 204, 211, 213, 214, 221, 223 , 224, 101, 215, 218, 219, 225, 228, 229, 1211, 1213, 1214, 1221, 1223, 1224 liquid level controls, enclosed type (general purpose or weatherproof type enclosure by Suffixes G, S or W respectively).
- Types 72, 123 low water controls.
- Types DA-71, -121, -130F, -130T, -131Q, combination pressure and low water controls.

Notes:

1. *Various "specification" numbers or suffix numbers may be used to denote the switch used in each case.
2. Types 175, 301 etc. and 201, 203 etc. may have one or two of the Suffixes 5813, 5814, 5815, 5821, 5820, 4806, 4810, 4813, 4814, 4815, 4821, 4820, 7806, 7810, 7810-10, 8806, 8810, 8810-10, 13, 14, 15, 20 and 21 appearing in the type number, denoting switch rating, circuit arrangement etc. (e.g. 201W-4813-21). Ratings:

Unless otherwise listed above, the electrical rating which is marked on any control may be any value up to the max rating of the mercury switch, or switches, used in that control in each instance.

The various mercury switches used in these controls are listed below together with their electrical ratings:

	General Use (ac/dc amps)			Ratings		Horse-power (single-phase)	
	120V	240V	(ac only)	Non-Ind. (ac only)	Watts	AC	DC
Tilting Type*	10	5	3/1	2040	4080	3/4	1/3
+ 9-51	4	2	1/-	1000	1000	1/8	-

9-63	4	2	1/-	-	-	1/8	-
9-78	6	3	1/-	920	920	1/6	1/6
9-62	4	2	1/-	-	-	1/8	-
9-64	4	2	1/-	-	-	1/8	-
9-66	4	2	1/-	-	-	1/8	-
9-67	4	2	1/-	-	-	1/8	-
9-69	4	2	1/-	-	-	1/8	-

Magnetic Type*	General Rating		Horsepower			Non- ind. 120/ 240V
	24VA ac dc	120VA ac dc	24VA ac dc	120/240V ac 1 phase	120/240V dc	
**9-81	0.9 0.45	0.3 0.15	0.15 0.07	-	-	1/0.5
**9-83	0.9 0.45	0.3 0.15	0.15 0.07	-	-	1/0.5
**3-91	--	5 2.5	2 1	1/8	1/10	-
**3-93	--	5 2.5	2 1	1/8	1/10	-

*Additional letters may appear in these switch designations to denote lead length, lead termination, etc.

**These switches have been investigated for 30,000 operations.

+These switches have been investigated for 100,000 operations.