

250RA 12T9VLC-01

## 250RA SERIES REFRIGERANT SOLENOID VALVES

The 250RA is a 2-way, normally closed diaphragm valve used for liquid, suction, and hot gas service. It is applied in various commercial air-conditioning and refrigeration systems.

### FEATURES

- Single coil family fits all sizes
- Can be brazed into the line without disassembly
- Compatible with all common A1 and A2L class refrigerants
- PTFE upgraded diaphragm design for high temperature and pressure applications
- Extended ends for easy installation (standard)
- Mounting stud models can be field converted to manual stem

### SPECIFICATIONS

Maximum Fluid Temperature..... A1: 250° F (121° C)  
 .....A2L: 221° F (105° C)  
 Maximum Working Pressure..... 680 psig (47 bar)  
 Maximum Operating Pressure Differential ..... 300 psig (21 bar)  
 UL/CUL File Number ..... MP604

### MODEL NUMBER NOMENCLATURE - Example: 250RA 12T9VLC-01

VALVE SERIES	DESIGN SERIES	PORT SIZE	CONNECTION TYPE	CONNECTION SIZE	VALVE CONFIGURATION	*COIL	SEQUENTIAL IDENTIFIER	CUSTOMER SPECIAL	PACK TYPE
250R	A	12	T	9	M	VLC			
Normally Closed Solenoid Valves with increased MWP	Diaphragm Design	In 1/16"	T = ODF Extended End	In 1/8"	M = Manual Opening Stem T = Mounting Stud  (Omit for Standard)	VLC = Valve Less Coil  For Valves with Coil See Coil Nomenclature on Coil Catalog Page	-01 Thru -99	G = Customer Special  (Omit for Standard)	B1 = Bulk Pack  (Omit for Individual Pack)

\* Valves in catalog are shipped without solenoid coils (VLC = Valve Less Coil). See Coil pages for coil selection and a complete list of voltage options.

### 250RA SERIES REFRIGERANT SOLENOID VALVES

VALVE CONFIG.	PORT SIZE (IN)	CONN. SIZE & TYPE	NOMINAL LIQUID CAPACITY - TONS (KW)											MODEL NUMBER	ITEM NUMBER
			R134a	R22	R32	R404A / R507	R407A	R407C	R410A	R448A / R449A	R450A / R513A	R-454A	R454B / R452B		
Standard Valve	1/2	5/8 ODF												250RA 8T5VLC-01	1838403
Mounting Stud		5/8 ODF	12.1 (42.6)	15.6 (54.9)	21.2 (74.6)	10.3 (36.2)	11.0 (38.8)	14.8 (52.1)	14.6 (51.2)	15.7 (55.1)	10.8 (37.8)	14.5 (51.0)	14.1 (49.6)	250RA 8T5TVLC-01	1838391
Manual Opening Stem		5/8 ODF												250RA 8T5MVLC-01	1840052
Manual Opening Stem		7/8 ODF												250RA 8T7MVLC-01	1840061
Standard Valve	9/16	7/8 ODF												250RA 9T7VLC-01	1838420
Mounting Stud		7/8 ODF	21.0 (74.0)	30.5 (107.3)	41.5 (145.9)	20.1 (70.7)	21.6 (75.9)	29.0 (102.0)	28.5 (100.2)	30.6 (107.7)	21.0 (74.0)	28.3 (99.6)	27.6 (97.0)	250RA 9T7TVLC-01	1838411
Manual Opening Stem		5/8 ODF												250RA 9T5MVLC-01	1840079
Manual Opening Stem		7/8 ODF												250RA 9T7MVLC-01	1840087
Standard Valve	3/4	1-1/8 ODF												250RA 12T9VLC-01	1838340
Mounting Stud		1-1/8 ODF	27.1 (95.3)	34.9 (122.7)	47.5 (166.9)	23.0 (80.9)	24.7 (86.9)	33.2 (116.8)	32.6 (114.6)	29.0 (102.0)	24.1 (84.6)	32.4 (114.0)	31.5 (111.0)	250RA 12T9TVLC-01	1838331
Manual Opening Stem		7/8 ODF												250RA 12T7MVLC-01	1839991
Manual Opening Stem		1-1/8 ODF												250RA 12T9MVLC-01	1840001
Standard Valve	1	1-3/8 ODF												250RA 16T11VLC-01	1838366
Mounting Stud		1-3/8 ODF	45.0 (158.3)	58.0 (203.9)	78.9 (277.4)	38.3 (134.7)	41.1 (144.4)	55.2 (194.1)	54.2 (190.5)	58.2 (204.8)	40.0 (140.6)	53.9 (189.4)	52.4 (184.4)	250RA 16T11TVLC-01	1838358
Manual Opening Stem		1-1/8 ODF												250RA 16T9MVLC-01	1840028
Manual Opening Stem		1-3/8 ODF												250RA 16T11MVLC-01	1840010
Standard Valve	1-1/4	1-5/8 ODF												250RA 20T13VLC-01	1838382
Mounting Stud		1-5/8 ODF	70.9 (249.4)	95.4 (335.5)	129.7 (456.3)	65.7 (231.1)	67.5 (237.5)	90.8 (319.3)	89.1 (313.4)	95.8 (336.8)	65.8 (231.3)	88.6 (311.6)	86.2 (303.3)	250RA 20T13TVLC-01	1838374
Manual Opening Stem		1-3/8 ODF												250RA 20T11MVLC-01	1840036
Manual Opening Stem		1-5/8 ODF												250RA 20T13MVLC-01	1840044

Capacities based on 100°F liquid and 40°F saturated evaporator per AHRI standard 760. All ratings are based on largest connection size.

**EXPLODED VIEW & PARTS KIT DATA**

**250RA SERIES PART KITS**

DESCRIPTION	MODEL NUMBER	ITEM NUMBER
<b>Repair Kits</b>		
250RA 8 Solenoid Valve Repair Kit (K)	KS-30401	1838462
250RA 9 Solenoid Valve Repair Kit (K)	KS-30402	1838471
250RA 12 Solenoid Valve Repair Kit (K)	KS-30403	1838489
250RA 16 Solenoid Valve Repair Kit (K)	KS-30404	1838497
240RA, 250RA 20 Solenoid Valve Complete Kit (K)	KS-30325	060630
<b>Manual Opener Kits</b>		
240RA, 250RA 8 Solenoid Valve Manual Opener Kit (M)	KS-30066	044657
240RA, 250RA 9 and 12 Solenoid Valve Manual Opener Kit (M)	KS-30067	044658
240RA, 250RA 16 Solenoid Valve Manual Opener Kit (M)	KS-30068	044491
240RA, 250RA 20 Solenoid Valve Manual Opener Kit (M)	KS-30098	047723
<b>Gasket Kits</b>		
240RA, 250RA, 540RA Gasket Kit (G)	KG-10028	054356
<b>Tool Kits</b>		
Magnetic Solenoid Tool opens a normally closed solenoid valve in the de-energized state and provides an orifice to manually adjust opening stem.	SOLENOID TOOL	066019

**VALVE REPAIR KIT**

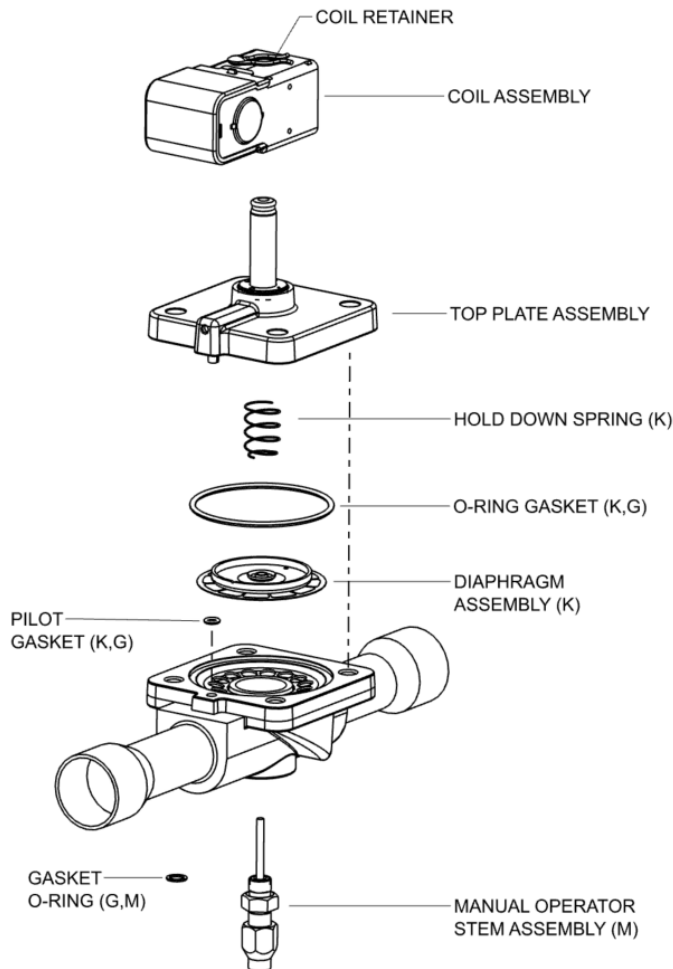
(K) indicates part is supplied in valve repair kit.

**MANUAL STEM KIT**

(M) indicates part is supplied in manual stem kit

**GASKET KIT**

(G) indicates gasket is supplied in gasket kit.



Extended capacity tables



**EXPLODED VIEW & PARTS KIT DATA**

**240RA SERIES PART KITS**

DESCRIPTION	MODEL NUMBER	ITEM NUMBER
<b>Complete Kits</b>		
200RA 8 Solenoid Valve Complete Kit (K)	KS-30321	060626
200RA 9 Solenoid Valve Complete Kit (K)	KS-30322	060627
240RA 12 Solenoid Valve Complete Kit (K)	KS-30323	060628
240RA 16 Solenoid Valve Complete Kit (K)	KS-30324	060629
240RA 20 Solenoid Valve Complete Kit (K)	KS-30325	060630
<b>Manual Opener Kits</b>		
240RA 8 Solenoid Valve Manual Opener Kit (M)	KS-30066	044657
240RA 9 and 240RA 12 Solenoid Valve Manual Opener Kit (M)	KS-30067	044658
240RA 16 Solenoid Valve Manual Opener Kit (M)	KS-30068	044491
240RA 20 Solenoid Valve Manual Opener Kit (M)	KS-30098	047723
<b>Gasket Kits</b>		
240RA and 540RA Gasket Kit (G)	KG-10028	054356
<b>Tool Kits</b>		
100RB, 240RA and 540RA Solenoid Valve Universal (2/3 hole) Spanner Wrench (Included in complete valve kit)	X-11981-1	027451
Magnetic Solenoid Tool opens a normally closed solenoid valve in the de-energized state, incorporates a spanner wrench for easy disassembly of solenoid valve series 100RB, 200RB, 240RA, and provides an orifice to manually adjust opening stem.	SOLENOID TOOL	066019

**VALVE REPAIR KIT**

(K) indicates part is supplied in valve repair kit.

**MANUAL STEM KIT**

(M) indicates part is supplied in manual stem kit

**GASKET KIT**

(G) indicates gasket is supplied in gasket kit.

