

R-410A

The 200RD is a pilot-operated, 2-way, normally closed, R-410A valve. 200RD valves are used for liquid, discharge, or suction gas refrigerant service.

Features

- One coil fits all valve sizes
- Extended ends for easy installation (standard)
- Long-life molded coils
- PTFE O-ring for superior external sealing

Options

- Available in 5 orifice sizes
- Manual stem or mounting stud
- Bi-Flow operation-conversion either factory assembled or with kit except 200RD 7,9 & 12



Specifications

- Maximum fluid temperature: 250°F
- Maximum working pressure: 680 psig
- Minimum operating pressure drop: 2 psi
- MOPD: 550 psig
- UL/CUL file number: MP604

NOTE: Mounting enclosing tube more than 90° off vertical up position is not recommended.

Nomenclature example: 200RD 4T3M VLC

200R	D	4	T	3	M	VLC
Valve Series	Design Series	Port Size (in 1/16")	Connection Type T = Copper Extended Ends	Connection Size (In 1/8")	M = manual stem T = mounting stud (optional)	Coil*

*NOTE: Valves are shipped without the solenoid coils (VLC = Valve Less Coil). See available coil assemblies.

Ordering Information and Nominal * Liquid Capacity - Tons (kW)

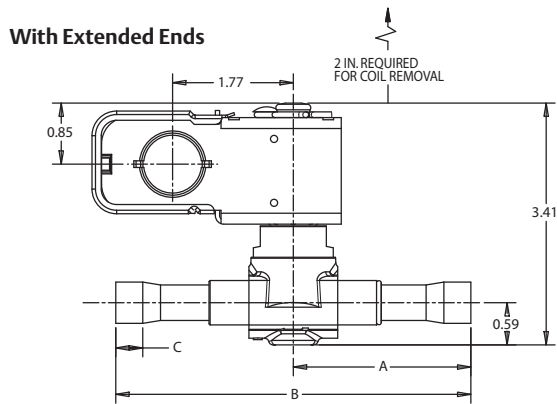
PCN			Description	Connection Size	R-410A
Standard Valve	Mounting Stud ¹	Manual Stem ²			
066158	066179	-	200RD 2 T 2	1/4 ODF	3.2 (11.3)
066159	066180	-	200RD 2 T 3	3/8 ODF	
066160	-	-	200RD 3 T 2	1/4 ODF	4.5 (15.8)
066161	066182	066203	200RD 3 T 3	3/8 ODF	
066162	066183	066204	200RD 3 T 4	1/2 ODF	
066163	066184	066205	200RD 4 T 3	3/8 ODF	7.3 (25.7)
066164	066185	066206	200RD 4 T 4	1/2 ODF	
066165	066186	066207	200RD 4 T 5	5/8 ODF	
066166	066187	066208	200RD 5 T 3	3/8 ODF	7.7 (27.1)
066167	066188	066209	200RD 5 T 4	1/2 ODF	
066168	066189	066210	200RD 5 T 5	5/8 ODF	
066169	066190	066211	200RD 6 T 4	1/2 ODF	8.8 (30.9)
066170	066191	066212	200RD 6 T 5	5/8 ODF	

¹ Add "T" to the end of description for Mounting Stud

² Add "M" to the end of the description for Manual Stem

Capacities based on ARI standard.

*See Extended Capacity Tables for ratings at a wide range of conditions.



With Extended Ends

Valve	Port Size	Conn. Size & Style	A	B	C		
200RD 2T2	1/8	1/4 ODF	2.42	4.62	0.25		
200RD 2T3		3/8 ODF			0.31		
200RD 3T2	3/16	1/4 ODF			0.25		
200RD 3T3		3/8 ODF			0.31		
200RD 3T4	1/4	1/2 ODF			2.50	5.00	0.38
200RD 4T4		5/8 ODF			3.25	6.50	0.50
200RD 4T5	5/16	3/8 ODF	2.31	4.62	0.31		
200RD 5T3		1/2 ODF	2.50	5.00	0.38		
200RD 5T4		5/8 ODF	3.25	6.50	0.50		
200RD 5T5	3/8	3/8 ODF	2.31	4.62	0.31		
200RD 6T3		1/2 ODF	2.50	5.00	0.38		
200RD 6T4		5/8 ODF	3.25	6.50	0.50		
200RD 6T5							

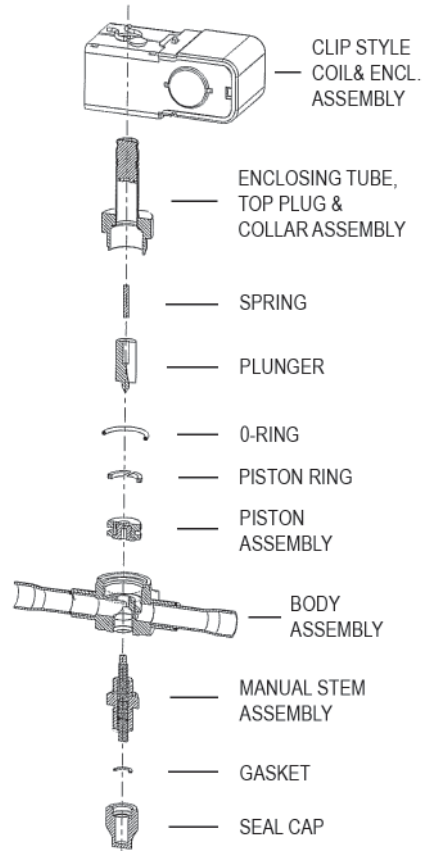
Exploded View & Parts Kit Data

Valve Repair Kit
 "K" indicates part is supplied in valve repair kit KS30386. (PCN 066223)

Gasket Kit
 Gasket Kit KG10025 (PCN 049190)
 (contains 12 pieces - each of PTFE and neoprene O-rings)

Coil Assembly
 See coil assemblies for availability.

Bi-Flow Conversion Kit
 KS30387 (PCN 066224)



Features

- Compact designs
- Coil windings are insulated to provide shock and vibration protection
- ASC2 is designed to provide weather protection
- Interchangeable housings

Voltage Options

- 24V 50/60 Hz
- 120V 50/60 Hz (standard)
- 208-220/208-240V 50/60 Hz
- 480V 50/60 Hz
- 120-240V 50/60 Hz
- 12V D.C. (MM Series recommended)
- 24V D.C. (MM Series recommended)

Nomenclature

Coil Code		
A	M	G
Series	Insulation	Enclosure
A = 12 Watt	B or G = Class B	C = Conduit Connection
B = 15 Watt	M = Class F	E = Explosion Proof
C = 18 Watt	H = Class H	F = Open Frame Leads
D = 7 Watt		G = Junction Box
M = 4 Watt		L = Grommet 18" Leads
		S = Spade Connection

ASC2 – DIN



Requires ASC2 female connector (PCN 059261).

MMG – Special DC



AMC - 1/2" Conduit



AMG - Junction Box



AMS - Open Frame



MAGMAX Coil (Type MM): For Use On DC Applications Only

Voltage	Amperes Holding	Watts Holding
12VDC	0.4	4
24VDC	0.4	4

Solenoid Coil Prefix Selection Table

1) Select Prefix 2) Select Voltage 3) Select PCN

Valve Type	J-Box	Conduit	Leads	Spades	Molded-DIN With Connector
50RB	-	-	SML*	-	-
100RB	AMG	AMC	AMF	AMS	ASC2
200RB	AMG	AMC	AMF	AMS	ASC2
222CB (Steam)	AHG	AHC	-	-	-
401	AMG	AMC	AMF	AMS	ASC2
500RB	DMG	-	DMF	DMS	-
540RA	-	-	-	DMS	ASC2
222CB (Water)	AMG	AMC	AMF	AMS	ASC2
Special DC Application	MMG	-	MMF	-	-

* SML is OEM - RMF is Wholesale replacement

Note - All coils NEMA1 except ASC2 NEMA2

AM/EM Coil:

240CD
214CA
211CA
222CB
210CA

Nominal Voltage and Frequency	Applied Voltage and Frequency	121		201		211		231		241	
		Inrush	Holding	Inrush	Holding	Inrush	Holding	Inrush	Holding	Inrush	Holding
24/60	24/60	1.23	0.61	1.17	0.61	0.92	0.61	1.00	0.74	0.92	0.61
120/60	120/60	0.23	0.14	0.22	0.14	0.17	0.14	0.19	0.16	0.17	0.14
240/60	240/60	0.13	0.08	0.12	0.08	0.10	0.08	0.11	0.08	0.10	0.08
480/60	480/60	0.06	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.05	0.04

See the MM (MAGMAX) Series Coil for DC Applications

AM Coil:
702RA

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	1.70	1.00	24	17/12	Class F Molded
24-50/60	24/60	1.41	0.64	15		
120-50/60	120/50	0.38	0.24	29		
120-50/60	120/60	0.32	0.16	19		
208-220/50 208-240/60	208/50	0.17	0.10	21		
208-220/50 208-240/60	208/60	0.15	0.06	13		
208-220/50 208-240/60	220/50	0.20	0.14	33		
208-220/50 208-240/60	240/60	0.22	0.09	22		
480-50/60	480/50	0.10	0.07	33		
480-50/60	480/60	0.09	0.04	22		

See the MM (MAGMAX) Series Coil for DC Applications

AM Coil:
100RB
240RA
710/713RA
EPRB(S)

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA	Watts Max.	Coil Insulation
		Inrush	Holding	Holding		
24-50/60	24/50	1.20	.96	23	17/12	Class F Molded
24-50/60	24/60	1.0	.74	18		
120-50/60	120/50	.25	.21	25		
120-50/60	120/60	.19	.16	19		
208-220/50 208-240/60	208/50	.14	.08	17		
208-220/50 208-240/60	208/60	.12	.06	12		
208-220/50 208-240/60	220/50	.16	.10	24		
208-220/50 208-240/60	240/60	.13	.08	19		
480-50/60	480/50	.06	.05	24		
480-50/60	480/60	.05	.04	19		

See the MM (MAGMAX) Series Coil for DC Applications

AM Coil:
200RB

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	2.00	.96	23	17/12	Class F Molded
24-50/60	24/60	1.6	.74	18		
120-50/60	120/50	.45	.21	25		
120-50/60	120/60	.36	.16	19		
208-220/50 208-240/60	208/50	.19	.08	17		
208-220/50 208-240/60	208/60	.15	.06	12		
208-220/50 208-240/60	220/50	.24	.10	24		
208-220/50 208-240/60	240/60	.19	.08	19		
480-50/60	480/50	.11	.05	24		
480-50/60	480/60	.09	.04	19		

See the MM (MAGMAX) Series Coil for DC Applications

ASC2 Coil:
200RB
540RA

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	2.18	1.07	26	12	Class F Molded
24-50/60	24/60	1.90	.81	19		
120-50/60	120/50	.43	.21	25		
120-50/60	120/60	.38	.16	19		
240-50/60	240/50	.24	.12	30		
240-50/60	240/60	.21	.09	22		

DM Coil:
500RB

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	1.80	.71	17	10	Class F Molded
24-50/60	24/60	1.56	.52	12		
120-50/60	120/50	.36	.14	17		
120-50/60	120/60	.31	.10	12		
240-50/60	240/50	.19	.08	19		
240-50/60	240/60	.17	.06	14		

ASC2 Coil:
100RB
240RA
710/713RA
EPRB(S)

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	1.67	1.10	26	12	Class F Molded
24-50/60	24/60	1.41	.83	20		
120-50/60	120/50	.31	.22	26		
120-50/60	120/60	.26	.16	20		
240-50/60	240/50	.17	.13	31		
240-50/60	240/60	.15	.10	23		

DM Coil:
100RB
240RA
710/713RA
EPRB(S)

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	1.21	.72	17	10	Class F Molded
24-50/60	24/60	1.02	.52	13		
120-50/60	120/50	.24	.14	17		
120-50/60	120/60	.20	.10	12		
240-50/60	240/50	.13	.08	20		
240-50/60	240/60	.11	.06	14		

RMS/RMF Coil:
50RB

Nominal Voltage and Frequency	Applied Voltage and Frequency	Amperes		VA Holding	Watts Max.	Coil Insulation
		Inrush	Holding			
24-50/60	24/50	.87	.50	12	7	Class F Molded
24-50/60	24/60	.90	.40	10		
120-50/60	120/50	.19	.19	22		
120-50/60	120/60	.17	.09	10		
208-50/60	208/60	.08	.03	7		
220-50/60	220/50	.10	.05	11		
240-50/60	240/50	.11	.06	14		
240-50/60	240/60	.10	.04	11		

Ordering Information

AMG - Junction Box

AMC - 1/2" Conduit

AMS - Open Frame



6" Leads



18" Leads



18" Leads or
1.4" Spades

Voltage/ Frequency	Description	PCN	Description	PCN	Description	PCN
24V 50/60 Hz	AHG 24V 50/60 Hz	057669	AMC 24V 50/60 Hz	057631	AMF 24V 50/60 Hz	057539
	AMG 24V 50/60 Hz	057341	AHC 24V 50/60 Hz	057736	AMF 24V 50/60 Hz	057538
	DMG 24V 50/60 Hz	055129	--	--	RMF 24V 50/60 Hz	065677
	--	--	--	--	AMS 24V 50/60 Hz	057603
	--	--	--	--	RMS 24V 50/60 Hz	065680
120V 50/60 Hz	AHG 120V 50/60 Hz	057673	AMC 120V 50/60 Hz	057598	RMF 120V 50/60 Hz	065678
	AMG 120V 50/60 Hz	057331	AHC 120V 50/60 Hz	057743	AMS 120V 50/60 Hz	057349
	DMG 120V 50-60 Hz	054762	--	--	RMS 120V 50/60 Hz	065204
208-220/208-240 50/60 Hz	AHG 208-220/208-240 50/60 Hz	057671	AHC 208-220/208-240 50/60 Hz	057741	AMF 208-220/208-240 50/60 Hz	057540
	AMG 208-220/208-240 50/60 Hz	057342	AMC 208-220/208-240 50/60 Hz	057594	RMF 208-220/208-240 50/60 Hz	065679
	DMG 208-220/208-240 50/60 Hz	054764	--	--	AMS 208-220/208-240 50/60 Hz	057531
	--	--	--	--	RMS 208-220/208-240 50/60 Hz	065681
480V 50/60 Hz	AMG 480V 50/60 Hz	057527	--	--	AMF 480V 50/60 Hz	057534
120-240V 50/60 Hz	AMG 120-240V 50/60 Hz	057343	AMC 120-240V 50/60 Hz	057730	AMF 120-240V 50/60 Hz	062410
277V 60 Hz	AMG 277V 60 Hz	057528	--	--	AMF 277V 50/60 Hz	057533
	--	--	--	--	AMS 277V 50/60 Hz	057714
12V DC	AMG 12V DC	057521	AMC 12V DC	057596	--	--
24V DC	AMG 24V DC	057523	AMC 24V DC	057633	--	--

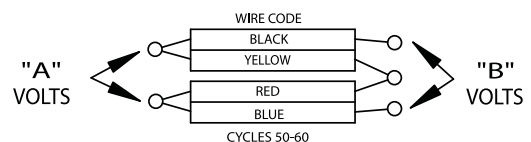
ASC2 - DIN

MMG - Special DC



Voltage/Frequency	Description	PCN	Description	PCN
24V 50/60 Hz	ASC2 24/50-60	062792	--	--
24V 50/60 Hz	ASC2L 24/50-60	063542	--	--
120V 50/60 Hz	ASC2 120/50-60	062462	--	--
120V 50/60 Hz	ASC2 GS-2562-1	015384	--	--
208-220/208-240 50-60 Hz	ASC2 208-240/50-60	062463	--	--
208-220/208-240 50-60 Hz	ASC2 GS-2562-2	015383	--	--
12V	--	--	MMG 12V DC	063524
12V	--	--	MMF 12V DC	062972
24V	ASC2 24V DC	064375	MMG 24V DC	063526

Dual Voltage Wiring Diagram



A	B
120	240
240	480

AM and ASC 2 style DC coils should not be used for direct replacements on OEM equipment. The use of this coil on new applications may result in the valve not opening. New applications should use the MM coil because of the significant increase in opening power of the MM Coil over the standard AM and ASC 2 style DC coil.

Coil Enclosure Options

Options	Code
Junction Box	G
Conduit - 18" Leads	C
Open Frame - 18" Leads	F
Open Frame - Spades	S