

FUSHENG SR To BSR

Replacement Guide



WARNING

Personal injury and/or equipment damage will result by failing to pay attention to the vital safety information and instructions in this manual. Carefully read, understand, and retain all safety information and instructions before operating this compressor.

2.6 R134a Air Cooled kW/RT Comparison

R134a - Air Cooled					
Fusheng BSR	kW	RT	Fusheng SR	kW	RT
BSR213HA	67	19	SRA-1H	136	27
BSR216HA	86	24	SRA-2H	169	33
BSR311HA	110	31	SRA-3H	190	39
BSR314HA	137	39	SRA-434H	244	48
BSR316HA	162	46			
BSR321HA	175	50	SRA-4H	367	71
BSR323HA	210	60			
BSR324HA	232	66	SRA-5H	419	83
BSR326HA	250	71			
BSR413HA	304	86	SRA-6H	538	106
BSR415HA	339	96			
BSR421HA	389	111	SRA-7H	620	121
BSR423HA	425	121			
BSR424HA	480	137			
BSR426HA	530	151			
BSR427HA	585	166			
BSR428HA	627	178			
BSR516LHA	669	190			
BSR518LHA	798	227			
BSR614LHA	970	276			
BSR616LHA	1079	307			
<i>Operation Condition S.S.T 2°C /S.D.T 48°C/SH 5°C/SC 5°C</i>					

3. Model Number Designation

3.1 BSR Model Number

BSR XX X - X X



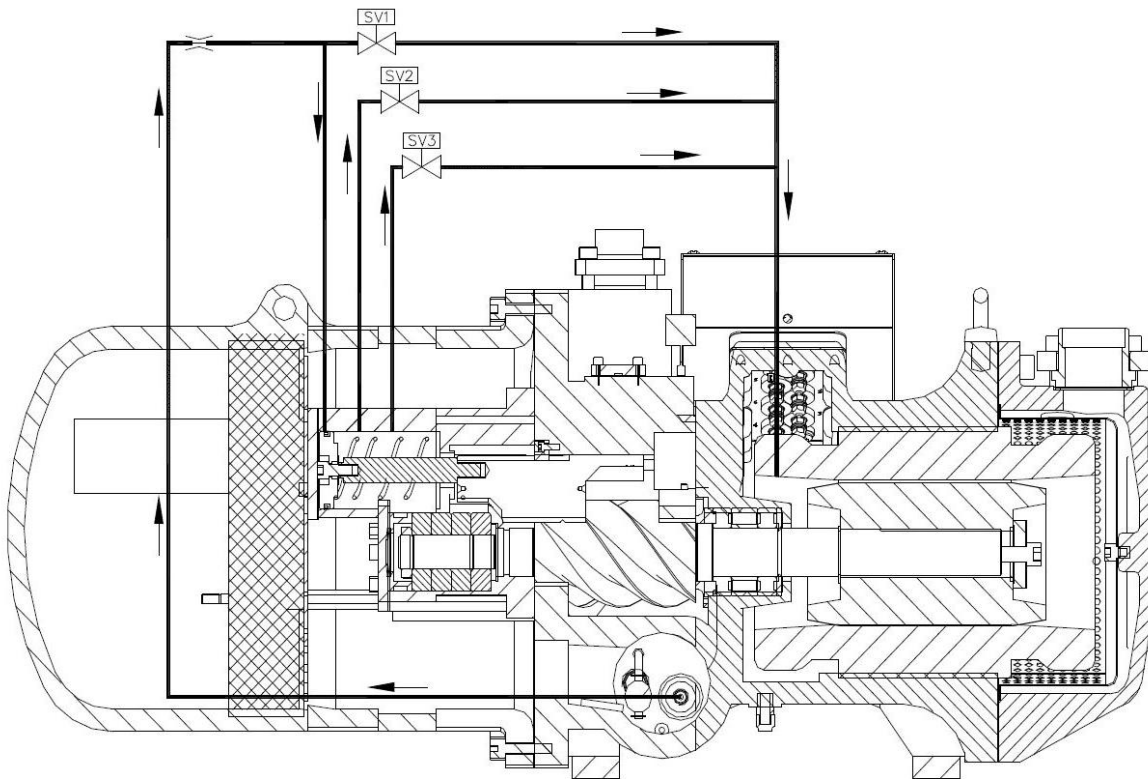
REFRIGERANT:
A: R-134a, B: R-22, C: R-407C, D*: R404A
*Low Temp

APPLICATION TYPE:
H: Air-Cooled
W: Water-Cooled

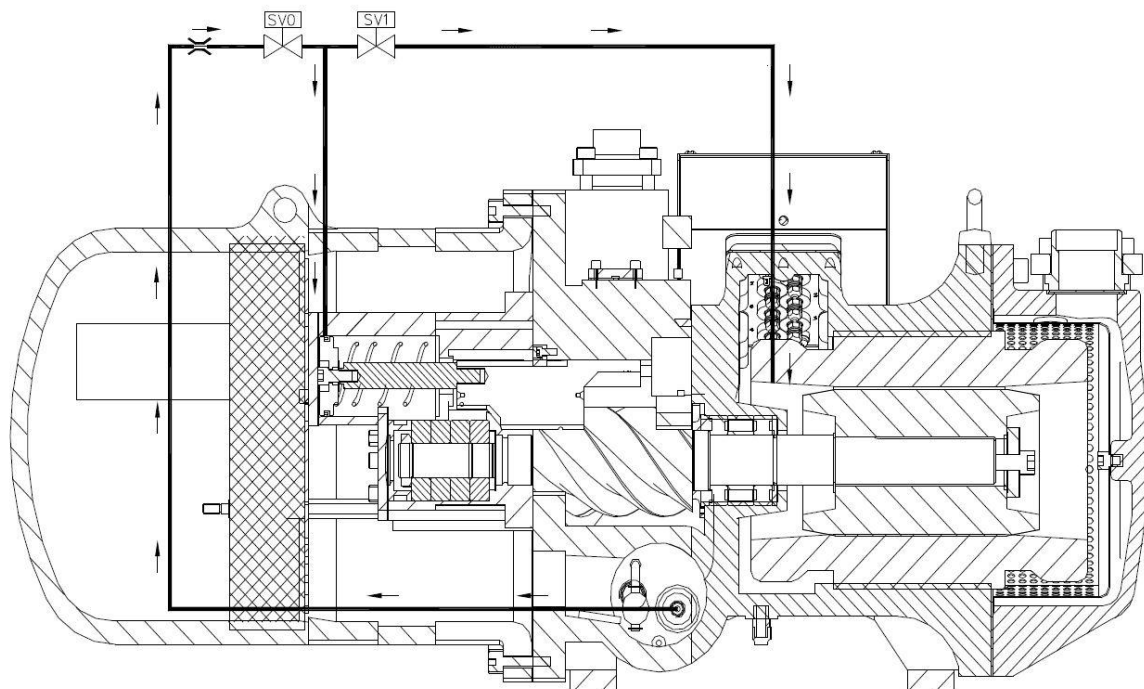
DISPLACEMENT CODE

FRAME SIZE CODE

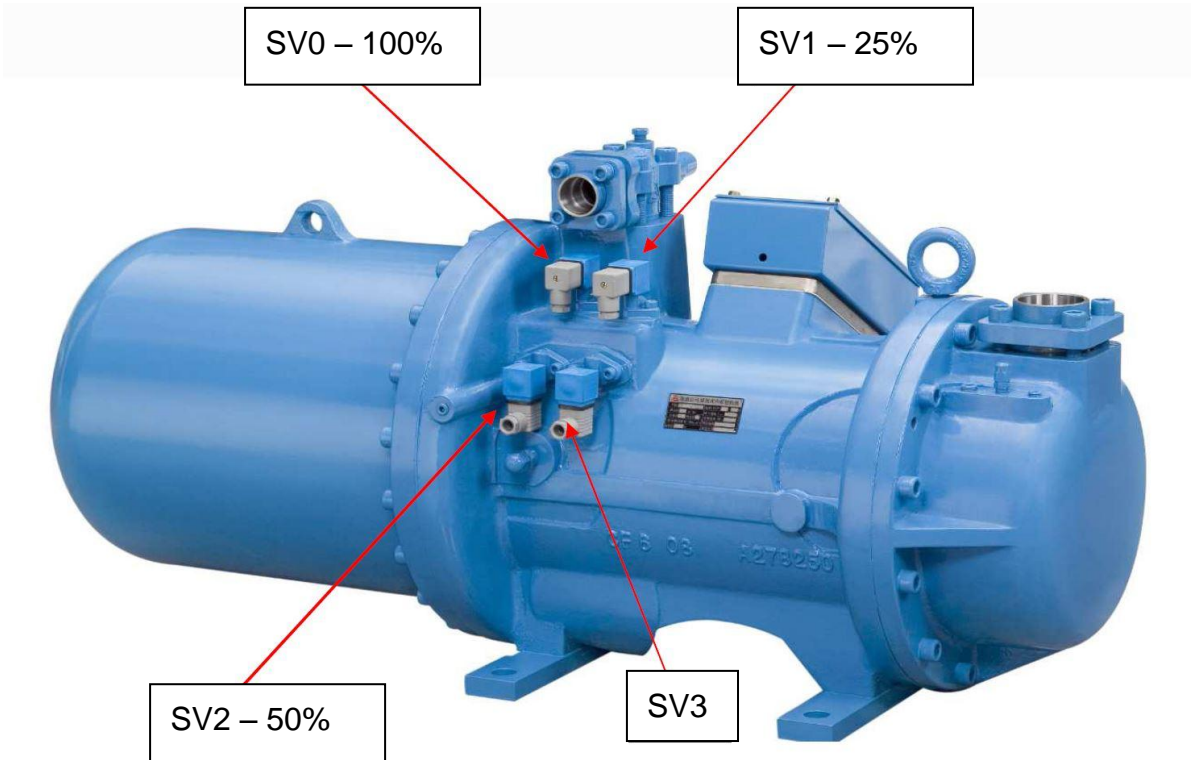
5. Fusheng BSR Capacity Control Diagrams



Solenoid Flowchart: 4-Step Capacity Control



Solenoid Flowchart: Linear Capacity Control (25%-100%)



8.2.5 BSR R-134a Air-Cooled

機種		BSR																							
Model		213 (S)	216	311 (S)	314	316	321	323	324	326	413	415	421	423	424	426	427	428	513II	514II	516II	613	614	616	
額定功率 Rated Power (kW)		26	31	39	48	56	61	72	80	91	103	114	129	142	158	175	192	206	183	204	228	271	329	366	
60Hz 220V	Y 接線堵住電流 Star -LRA (A)	254	254	310	417	398	398	471	590	590	582	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Δ 接線堵住電流 Delta -LRA (A)	814	814	990	1342	1230	1230	1460	1876	1876	1850	-	-	-	-	-	-	-	-	-	-	-	-	-	
	最大運轉電流 I _{max} (A)	128	155	190	235	279	305	360	393	447	532	-	-	-	-	-	-	-	-	-	-	-	-	-	
	導線 選用 Wire selected	需求安培容量 Maximum capacity(A)	92	112	137	170	201	220	260	284	323	384	-	-	-	-	-	-	-	-	-	-	-	-	-
		參考線徑 Nominal cross section(mm ²)	38	50	60	100	125	125	200	200	250	325	-	-	-	-	-	-	-	-	-	-	-	-	-
	NFB AF		225	250	400	400	600	600	600	600	800	800	-	-	-	-	-	-	-	-	-	-	-	-	-
	NFB AT (A)		200	250	300	400	500	500	600	600	700	800	-	-	-	-	-	-	-	-	-	-	-	-	-
	M、D 接觸器電流 Magnetic contact current(A)		100	125	150	180	220	220	300	300	400	400	-	-	-	-	-	-	-	-	-	-	-	-	-
	S 接觸器電流 Magnetic contact current(A)		80	80	80	100	125	150	150	180	220	300	-	-	-	-	-	-	-	-	-	-	-	-	-
60Hz 380V	Y 接線堵住電流 Star -LRA (A)	141	141	182	245	231	231	265	345	345	334	449	545	545	649	748	903	1192	903	1192	1364	907	1050	1160	
	Δ 接線堵住電流 Delta -LRA (A)	459	459	582	789	714	714	840	1094	1094	1042	1381	1717	1717	2045	2361	2800	3814	2800	3814	4551	3239	3750	4146	
	最大運轉電流 I _{max} (A)	74	90	110	137	162	179	208	228	259	308	342	380	421	462	513	561	601	533	586	664	778	946	1052	
	導線 選用 Wire selected	需求安培容量 Maximum capacity(A)	53	65	80	99	117	129	150	164	187	222	247	274	304	334	370	405	434	385	423	479	561	683	759
		參考線徑 Nominal cross section(mm ²)	14	22	30	38	50	60	80	80	100	150	150	200	250	250	325	325	400	325	400	500	600	800	800
	NFB AF		125	225	225	225	250	400	400	400	400	600	600	600	800	800	800	800	800	800	1000	1000	1200	1600	1600
	NFB AT (A)		125	150	200	225	250	300	350	350	400	500	600	600	700	700	800	700	700	800	900	1000	1200	1600	1600
	M、D 接觸器電流 Magnetic contact current(A)		80	80	80	100	125	150	150	180	220	300	300	300	400	400	400	500	500	400	500	500	600	800	800
	S 接觸器電流 Magnetic contact current(A)		35	50	50	80	80	80	100	100	125	150	150	180	180	220	220	300	300	300	300	300	400	400	500
60Hz 440V	Y 接線堵住電流 Star -LRA (A)	130	130	155	215	190	190	241	302	302	291	366	494	494	586	717	793	1028	793	1028					
	Δ 接線堵住電流 Delta -LRA (A)	403	403	495	690	589	589	747	937	937	925	1136	1592	1592	1790	2242	2582	3290	2582	3290					
	最大運轉電流 I _{max} (A)	64	78	95	119	140	154	180	197	226	266	291	329	365	398	440	484	519	457	506	574	672	817	909	
	導線 選用 Wire selected	需求安培容量 Maximum capacity(A)	46	56	68	86	101	111	130	142	163	192	210	237	263	287	317	350	375	330	365	414	485	590	656
		參考線徑 Nominal cross section(mm ²)	14	22	22	30	50	50	60	80	80	125	125	150	200	200	250	250	325	250	325	325	500	600	800
	NFB AF		100	125	225	225	225	250	400	400	400	400	600	600	600	600	800	600	600	800	800	1000	1200	1600	1600
	NFB AT (A)		100	125	150	200	225	250	300	300	350	400	500	500	600	600	700	600	600	700	800	900	1200	1600	1600
	M、D 接觸器電流 Magnetic contact current(A)		50	80	80	100	100	125	150	150	180	220	220	300	300	300	400	400	400	400	400	500	500	600	800
	S 接觸器電流 Magnetic contact current(A)		35	35	50	50	80	80	80	100	100	125	125	150	180	180	220	220	220	220	220	220	300	300	400
60Hz 460V	Y 接線堵住電流 Star -LRA (A)	114	114	138	190	178	178	233	269	269	289	370	466	466	514	636	720	900	720	900					
	Δ 接線堵住電流 Delta -LRA (A)	370	370	441	611	567	567	722	861	861	889	1137	1458	1458	1593	2008	2262	2800	2262	2800					
	最大運轉電流 I _{max} (A)	60	74	91	112	133	146	172	190	216	253	280	317	350	379	424	463	497	442	484	549	643	782	869	
	導線 選用 Wire selected	需求安培容量 Maximum capacity(A)	43	53	66	81	96	105	124	137	156	183	202	229	253	274	306	334	358	319	349	396	464	564	627
		參考線徑 Nominal cross section(mm ²)	14	14	22	30	38	50	60	60	80	100	125	150	200	200	250	250	325	250	250	325	500	600	800
	NFB AF		100	225	225	225	225	225	400	400	400	400	600	600	600	600	800	600	600	800	800	1000	1000	1200	1600
	NFB AT (A)		100	125	150	200	200	225	300	300	350	400	500	500	600	600	700	600	600	700	800	900	1000	1200	1600
	M、D 接觸器電流 Magnetic contact current(A)		50	80	80	100	100	125	125	150	180	220	220	300	300	300	400	400	400	400	400	400	500	600	800
	S 接觸器電流 Magnetic contact current(A)		35	35	50	50	80	80	80	80	100	125	125	150	150	180	180	220	220	220	220	220	300	300	400

9. Displacement and Oil

9.1 Fusheng Oils For BSR Series

Model	Refrigerant	Oil	Part No.	Qty. (Liters)
BSR (W)	R22	FS 300R	2100130014	20
	R134a/R407C/R404A/R507A	FS 120R	2100130017	
BSR (H)	R22	FS 300R	2100130014	
	R134a	FS 120R	2100130017	

9.2 Displacement Comparison

Model	Displacement M ³ /h	Model	Displacement M ³ /h
SR-1(H)	145	BSR213- ^{**}	162
SR-2(H)	183	BSR216- ^{**}	206
SR-3(H)	221	BSR311- ^{**}	258
SR-434(H)	291	BSR314- ^{**}	322
SR-4(H)	362	BSR321- ^{**}	397
SR-5(H)	432	BSR324- ^{**}	528
SR-6(H)	557	BSR413- ^{**}	667
SR-7(H)	702	BSR421- ^{**}	835

10. Overall Dimensions and Weight

10.1 Mounting Dimension Comparison

Model	Axial x radial mm	Fixing hole dimension mm	Model	Axial x radial mm	Fixing hole dimension mm
SR-1(H)	260 x 400	4 x Ø24	BSR213- ^{**}	362 x 400	4 x Ø26
SR-2(H)	317 x 420	4 x Ø24	BSR216- ^{**}	362 x 400	4 x Ø26
SR-3(H)	317 x 420	4 x Ø24	BSR311- ^{**}	425 x 400	4 x Ø26
SR-434(H)	420 x 500	4 x Ø18	BSR314- ^{**}	425 x 400	4 x Ø26
SR-4(H)	302 x 540	4 x Ø24	BSR321- ^{**}	462 x 400	4 x Ø26
SR-5(H)	334 x 540	4 x Ø24	BSR324- ^{**}	462 x 400	4 x Ø26
SR-6(H)	284 x 595	4 x Ø24	BSR413- ^{**}	462 x 500	4 x Ø26
SR-7(H)	319 x 595	4 x Ø24	BSR421- ^{**}	590 x 500	4 x Ø26

11. M³/H and Horsepower Comparison

11.1 BSR M³/H and Motor HP

Model Number	M ³ /H Displ. 60Hz	Air Cooled	Water Cooled
		Motor HP(H)	Motor HP(W)
BSR213	162	60	50
BSR216	206	72	60
BSR311	258	84	72
BSR314	322	108	84
BSR316	379	130	115
BSR321	397	130	115
BSR323	474	160	130
BSR324	528	180	160
BSR326	566	180	180
BSR413	667	210	175
BSR415	742	240	210
BSR421	835	240	210
BSR423	912	270	240
BSR424	1024	320	270
BSR426	1130	355	320
BSR427	1270	400	355
BSR428	1338	450	400
BSR516L	1472	450	450
BSR518L	1743	550	500
BSR614L	2114	600	550
BSR616L	2351	660	600