

Mbsm.pro, pdf, TLS5FT, Tropical Compressor, R134a, 220-240V 50Hz

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1/5HP, Refrigerator, Samsung, Compressor, R134A, 220-240V, SD162Q- L1UA, PTC-RSCR, 6.16CC

Category: compressor

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Model No.: SD162Q-L1UA

Test condition: ASHARE

Evaporating Temperature: -23.3° C

Condensing Temperature: 54.4° C

Displacement: 6.16CC/ Rev

Oil: 180CC

Motor type: PTC-RSCR

Nominal voltage range: 187V~276V at 50Hz

Characteristics:

1. Strong load capacity
2. High efficiency & reliability
3. Reliable starting performance
4. Low noise

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RATED VOLTAGE	MODEL	VOLTAGE VOLT-HZ	MOTOR TYPE	DISPL. (cc)	HEIGHT (mm)	ASHRAE			EFFICIENCY (-23.3 °C)			COOLING TYPE	
						COOLING CAPACITY -23.3 °C			POWER INPUT W	EFF	COP		EER
						Kcal/Hr	Watt	BTU/Hr					
AC 110V/50-60Hz	CD124E-L1Z2	100-50	RSIR	2.40	157	43	50	171	68	0.63	0.74	2.51	ST
		100-60				52	60	206	68	0.76	0.89	3.04	
	CD130E-L1Z2	100-50	RSIR	2.93	157	58	67	230	76	0.76	0.89	3.03	ST
		100-60				70	81	278	79	0.89	1.03	3.52	
	SD137E-L1U2	100-50	RSCR	3.71	166	72	84	286	91	0.79	0.92	3.14	ST
	SD152E-L1W2	100-50	CSR	5.21	171	87	101	345	99	0.88	1.02	3.49	ST
		100-60				117	136	454	111	1.05	1.23	4.18	
	SD162E-L1W2	100-50	CSR	6.16	175	135	157	536	121	1.12	1.30	4.43	ST
		100-60				144	168	572	141	1.02	1.19	4.06	
	DD137-L1U2	100-50	RSCR	3.71	166	80	93	317	85	0.94	1.09	3.73	ST
		100-60				96	111	380	99	0.97	1.12	3.84	
	MD152E-L1U2	100-50	RSCR	5.21	171	118	137	468	103	1.15	1.33	4.55	ST
		100-60				143	166	568	118	1.21	1.41	4.81	
	MD162E-L1U2	100-50	RSCR	6.16	175	143	166	568	116	1.23	1.43	4.89	ST
		100-60				182	212	723	141	1.29	1.50	5.12	
	SK170E-L2W	100-50	CSR	6.99	189	168	195	667	149	1.13	1.21	4.48	FC
		100-60				206	240	818	170	1.21	1.41	4.81	
	SK182E-L2W	100-50	CSR	8.19	189	203	236	806	188	1.08	1.26	4.29	FC
		100-60				239	278	950	196	1.22	1.42	4.85	
	DK182E-L2U	100-50	RSCR	8.19	189	203	236	806	161	1.26	1.47	5.01	FC
		100-60				256	298	1016	191	1.34	1.56	5.32	
	DK190E-L2U	100-50	RSCR	9.07	189	239	267	913	190	1.28	1.49	5.07	FC
		100-60				280	326	1112	209	1.34	1.56	5.32	
	MK172E-L2U	100-50	RSCR	7.21	189	181	210	719	140	1.29	1.50	5.13	ST
100-60		226				263	897	162	1.40	1.62	5.54		

Samsung compressors are imported in Europe by: Procold S.r.l. - Italy
www.samsung-compressors.com www.procold.it

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1/5HP Refrigerator Compressor R134A 220-240V



Price : **US \$ 28/ Piece**
Payment Terms : **L/C, T/T, Western Union**
Trade Terms : **FOB**
Production Capacity : **6, 000, 000PCS/ Year**
Packing Details : **by Pallet**
Refrigerant Gas : **R134A**
Main Markets : **Global**
Place of Origin : **china**
Category : **Refrigerators**



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Model No.: SD162Q-L1UA
 Test condition: ASHARE
 Evaporating Temperature: -23.3° C
 Condensing Temperature: 54.4° C
 Displacement: 6.16CC/ Rev
 Oil: 180CC
 Motor type: PTC-RSCR
 Nominal voltage range: 187V~276V at 50Hz

Characteristics:

1. Strong load capacity
2. High efficiency & reliability
3. Reliable starting performance
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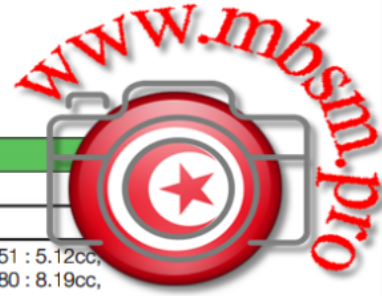


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Rated voltage	Item No.	Description	ASHARE					Cooling Type	Motor Type
			Capacity at 50Hz		COP (W/W) at 50Hz	Current (A) at 50Hz	Power Input (W)		
			W	Btu					
AC 220-240V/ 50Hz	MSA141Q-S1A	Refrigerator Compressor R134a LBP	122	416	1.27	0.67	96	Static	PTC-RSIR
	MSA143Q-S1Z		112	381	1.34	0.69	83	Static	PTC-RSIR
	SD151Q-L1UB		140	478	1.27	0.52	110	Static	RSCR
	SD162Q-L1UA		170	580	1.36	0.59	125	Static	PTC-RSCR
	MSA170Q-L1B		201	686	1.56	0.63	129	Static	RSCR
AC 200- 220V/ 50Hz or 220V/ 60Hz	SD152H-S1UB	Refrigerator Compressor R134a LBP	134	457	1.17	0.66	114	Static	RSCR
	SD162H-L1UB		170	580	1.22	0.82	139	Static	PTC-RSCR
	MSA170H-L1B		201	686	1.43	0.87	141	Static	RSCR



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1) Compressor model identification

NUMBER	MEANING
① Series	CD, SD, MD, SK, MK, HK, MSS, MSA, MSE, ENV, MKV, MSV
② Refrigerant	1 : R 134a (LBP) 4 : R 600a (LBP) 6 : R 134a (HBP)
③ Displacement (cc/Rev.) x 10	24 : 2.40cc, 30 : 2.93cc, 37 : 3.71cc, 43 : 4.38cc, 50 : 5.21cc, 51 : 5.12cc, 52 : 5.21cc, 60 : 6.16cc, 62 : 6.16cc, 70 : 6.99cc, 72 : 7.21cc, 80 : 8.19cc, 82 : 8.19cc, 83 : 8.19cc, 88 : 8.80cc, 90 : 9.07cc, A1 : 10.68cc, A2 : 12.13cc, A3 : 12.52cc, A5 : 15.32cc
④ Rated voltage and frequency	B : 220V ~ 60Hz C : 115V ~ 60Hz D : 115-127V ~ 60Hz E : 100V ~ 50/60Hz G : 220-240V ~ 50Hz, 220V ~ 60Hz H : 200-220V ~ 50Hz, 220V ~ 60Hz K : 200-220V ~ 50Hz P : 127V ~ 60Hz Q : 220-240V ~ 50Hz A : variable for BLDC
⑤ Application	L/R/S : Low Back Pressure H : High Back Pressure
⑥ Cooling type	0 : Oil cooling 1 : Static 2 : Fan cooling
⑦ Motor type	B/C/X : BLDC S : PTC or Current-CSIR U : PTC-RSCR (Optional RSIR) W : PTC-CSR Y : Current-RSIR Z : PTC-RSIR
⑧ Option	

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AC 220-240V~50Hz, 220V~60Hz	MSS151G-L1U	RSCR	220-50	129	145	496	90	1.39	1.61	5.51	ST
			220-60	152	177	603	107	1.42	1.65	5.64	
	MSA151G-L1B	RSCR	220-50	125	145	496	96	1.30	1.51	5.17	ST
			220-60	152	177	603	114	1.33	1.55	5.29	
	MSA162G-L1B	RSCR	220-50	151	176	599	119	1.27	1.48	5.04	ST
			220-60	187	217	742	140	1.34	1.55	5.30	
	MSS170G-L1U	RSCR	220-50	178	207	707	124	1.44	1.67	5.70	ST
			220-60	222	258	881	151	1.47	1.71	5.84	
MK183G-L2U	RSCR	220-50	203	236	806	149	1.36	1.58	5.41	FC	
		220-60	258	300	1024	179	1.44	1.68	5.72		
MK190G-L2U	RSCR	220-50	225	262	893	168	1.34	1.56	5.32	FC	
		220-60	285	331	1131	200	1.43	1.66	5.66		
AC 220-240V~50Hz	CD124Q-L1Z2	RSIR	220-50	43	50	171	57	0.75	0.88	2.99	ST
	CD130Q-L1Z2	RSIR	220-50	58	67	230	65	0.89	1.04	3.54	ST
	CD130Q-S1ZA	RSIR	220-50	58	67	230	74	0.78	0.91	3.11	ST
	CD137Q-S1U2	RSCR	220-50	72	84	286	80	0.90	1.05	3.57	ST
	SD137Q-L1ZB	RSIR	220-50	75	87	298	86	0.87	1.01	3.46	ST
	SD137Q-L1UB	RSCR	220-50	75	87	298	80	0.94	1.09	3.72	ST
	SD143Q-L1U2	RSCR	220-50	95	110	377	99	0.96	1.12	3.81	ST
	MSA143Q-S1Z	RSIR	220-50	96	112	381	83	1.16	1.34	4.59	ST
	SD152Q-L1UB	RSCR	220-50	120	140	476	104	1.15	1.34	4.58	ST
	MD152Q-L1U2	RSCR	220-50	118	137	468	98	1.20	1.40	4.78	ST
	SD162Q-L1UB	RSCR	220-50	146	170	580	125	1.17	1.36	4.64	ST

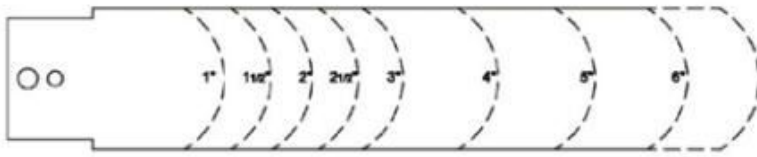
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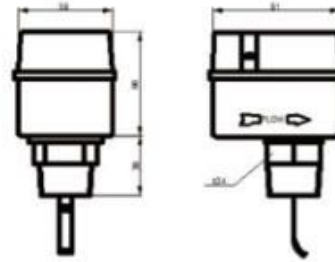
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Dimension of the paddle (Unit: inch)



FSF50P-1(A)/FSF50P-2(A)/FSF50P-3(A)



FSF50P-1SN

Application:

- FSF series flow switches are used in measuring and controlling the flow of the liquid in the pipe, such as water, alcohol, etc., as well as in the places where it needs chain effect or cutout protection.

FSF series flow switches have SPDT switch, full-sealing structure as its shell, and stainless steel as its inside components, which can assure its use in any conditions. FSF-A series flow switches are used for caustic fluid liquid, the materials of FSF-A in contact with the medium is stainless steel.

Feature:

- Ambient temperature: -20~50°C.
- Liquid temperature: -25~120°C.
- Max. liquid pressure: 1.5MPa.
- Approvals: DnV, Det norske Veritas(Norway), CQC(China)CE (Europe).

Our Customers:



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Mbsm.pro, ATA72XL, Lbp compressor, HuaGuang coolant, R134a, 220-240V 50/60Hz, 1/4HP, 1PH, 205 w, Lbp

Category: Solutions, Tester ok

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Mbsm.pro , ATA72XL , compressor , HuaGuang coolant , R134a , 220-240V 50/60Hz , 1/4HP , 1PH

Détails rapides

Lieu d'origine:
Guangdong, Chine

Marque:
Wanbao

Type:
Compresseur de réfrigération

Application:
Pièces de réfrigération

Certification:
ce, CCC / CB / VDE

Réfrigérant:
R134A

Marque:
Wanbao

Tension:
220-240V 50HZ

Déplacement:
72 cm³

Refroidissement:

ST / OC

Type de moteur:

RSIR

Capacité de refroidissement:

185 W

Capacité:

631 BTU

Max. Hauteur "A":

188

Wanbao Group Compressor Co., Ltd (anciennement connue sous le nom de Guangzhou Refrigeration Company Ltd, ci-après dénommée The Co.), a commencé sa production en 1987, est le premier fabricant à introduire une technologie et des équipements étrangers pour la production à grande échelle de compresseurs de réfrigérateurs en Chine . En 2014, The Co. a acquis le fabricant de compresseurs de réfrigérateurs à l'étranger-Italie ACC, puis a fondé l'italien Wanbao-ACC Co., Ltd. Cette action améliore le compresseur Wanbao de l'internationalisation du marché à l'internationalisation de la fabrication et jette des bases solides à l'internationalisation de la marque pour la prochaine étape.

La Co.a quatre bases de production à Guangzhou, Qingdao, Hefei et en Italie, avec une capacité de production annuelle de 26 millions d'unités, forgeant ainsi une configuration mondiale stratégique couvrant les principaux clients nationaux et étrangers. Wanbao Chine approvisionne principalement les grands fabricants de réfrigérateurs nationaux, y compris Haier, Hisense, Midea, Meiling, etc., ainsi que les fabricants d'appareils électroménagers de renommée internationale, y compris Electrolux Whirlpool, etc., en tant que fournisseur mondial. Wanbao-ACC Italy est un fournisseur majeur de fabricants européens d'appareils électroménagers haut de gamme.

Modèle	Réfrigérant	Tension	Capacité de refroidissement (w)	Application	COP (w / w)
AS43	R134a	220V / 50Hz	84	LBP	0,94
AS51	R134a	220V / 50Hz	107	LBP	1,01
ASD43K	R134a	220V / 50Hz	117	LBP	1.13
ASD53K	R134a	220V / 50Hz	144	LBP	1.2
ASD65	R134a	220V / 50Hz	173	LBP	1,23
ATA72X	R134a	220V / 50Hz	205	LBP	1,35
ATA80X	R134a	220V / 50Hz	230 1/4 hp++	LBP	1,35
ANA90	R134a	220V / 50Hz	255	LBP	1,35
AQAW110R	R134a	220V / 50Hz	260	LBP	1,15
ANA120	R134a	220V / 50Hz	345	LBP	1,3

Autre compresseur de congélateur wanbao que nous avons:

Pas	HP	Modèle	Réfrigérant	Qté/Une Palette
-----	----	--------	-------------	-----------------

1	1/10HP	ASD35K	R134a	100
2	1/6HP	ASD53K	R134a	80
3	1/5HP	AQAW66X	R134a	80
4	1/4HP	AQAW77X	R134a	80
5	1/4HP Gros	AQAW91	R134a	80
6	1/3HP	AQAW110	R134a	80
7	3/8HP	AL120	R134a	80
8	1/2HP	AL150	R134a	80
9	1/2HP, grand	AL180	R134a	80

型号 Model	气缸容积 Displacement cm ³	冷却方式 Cooling	电机类型 Motor Type	制冷量 Cooling Capacity		COP			认证 Certification	最大高度 "A" Max. Height "A"
				ASHRAE	CECOMAF	ASHRAE	CECOMAF			
				-23.3°C	-25°C	-23.3°C	-25°C			
				W	Btu	W	W/W	EER	W/W	

LBP

220-240V 50HZ R134a

T系列 T Series

型号	气缸容积	冷却方式	电机类型	ASHRAE	CECOMAF	ASHRAE	CECOMAF	ASHRAE	CECOMAF	认证	最大高度 "A"
ATA72X	7.2	ST/OC	RSIR	205	699	155.3	1.35	4.6	1.05	CCC/CB/VE	185/188
ATA80X	8.1	ST/OC	RSIR	230	785	174.2	1.35	4.6	1.05	CCC/CB	185/188
ATK72X	7.2	ST/OC	RSCR	205	699	154.0	1.40	4.8	1.09	CCC/CB/VDE/CE	185/188
ATK80X	8.1	ST/OC	RSCR	230	785	174.0	1.40	4.8	1.09	CCC/CB	185/188
▲ATD50V	5.0	ST	RSIR	140	478	105.2	1.25	4.3	0.98	CCC/CB	182
ATD66X	6.6	ST/OC	RSIR	190	648	142.8	1.25	4.3	0.98	CCC/CB	182
△ATA50K	5.0	ST	RSIR	144	491	108.9	1.35	4.6	1.05	CCC/CB	182/185
△ATA66K	6.6	ST	RSIR	190	648	142.8	1.25	4.3	0.98	CCC/CB	182
ATA66K(OC)	6.6	OC	RSIR	190	648	143.7	1.35	4.6	1.05	CCC/CB	188
ATA72K(OC)	7.2	OC	RSIR	205	699	154.0	1.35	4.6	1.05	CCC/CB	188
ATK55	5.5	ST	RSCR	160	546	121.0	1.35	4.6	1.05	CCC/CB	185
ATK60	6.0	ST	RSCR	180	614	135.0	1.51	5.2	1.18	CCC/CB/CE	185
ATK66	6.6	ST	RSCR	192	655	144.0	1.55	5.3	1.21	CCC/CB/CE	185

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www.mbsm.pro , Practical Electronics for Inventors, Fourth Edition

Category: Technologie,Web

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FOURTH EDITION

PRACTICAL ELECTRONICS FOR INVENTORS



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Practical Electronics for Inventors, Fourth Edition

by: Paul Scherz, Dr. Simon Monk

Abstract: A fully updated, no-nonsense guide to electronics. Advance your electronics knowledge and gain the skills necessary to develop and construct your own functioning gadgets. Written by a pair of experienced engineers and dedicated hobbyists, Practical Electronics for Inventors, Fourth Edition, lays out the essentials and provides step-by-step instructions, schematics, and illustrations. Discover how to select the right components, design and build circuits, use microcontrollers and ICs, work with the latest software tools, and test and tweak your creations. This easy-to-follow book features new instruction on programmable logic, semiconductors, operational amplifiers, voltage regulators, power supplies, digital electronics, and more. Coverage includes:

- Resistors, capacitors, inductors, and transformers
- Diodes, transistors, and integrated circuits
- Optoelectronics, solar cells, and phototransistors
- Sensors, GPS modules, and touch screens
- Op amps, regulators, and power supplies
- Digital electronics, LCDs, and logic gates
- Microcontrollers and prototyping platforms
- Combinational and sequential programmable logic
- DC motors, RC servos, and stepper motors
- Microphones, audio amps, and speakers
- Modular electronics and prototypes

Book Details

Title: Practical Electronics for Inventors, Fourth Edition

Publisher: McGraw-Hill Education: New York, Chicago, San Francisco, Athens,

London, Madrid, Mexico City, Milan, New Delhi, Singapore, Sydney, Toronto

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ISBN: 9781259587542

Authors:

Paul Scherz is a Systems Operation Manager who received his B.S. in physics from the University of Wisconsin. He is an inventor/hobbyist in electronics, an area he grew to appreciate through his experience at the University's Department of Nuclear Engineering and Engineering Physics and Department of Plasma Physics. Dr. Simon Monk has a bachelor's degree in cybernetics and computer science and a Ph.D. in software engineering. He spent several years as an academic before he returned to industry, co-founding the mobile software company Momote Ltd. He has been an active electronics hobbyist since his early teens and is a full-time writer on hobby electronics and open-source hardware. Dr. Monk is author of numerous electronics books, including Programming Arduino, Hacking Electronics, and Programming the Raspberry Pi.

Description: A fully updated, no-nonsense guide to electronics. Advance your electronics knowledge and gain the skills necessary to develop and construct your own functioning gadgets. Written by a pair of experienced engineers and dedicated hobbyists, Practical Electronics for Inventors, Fourth Edition, lays out the essentials and provides step-by-step instructions, schematics, and illustrations. Discover how to select the right components, design and build circuits, use microcontrollers and ICs, work with the latest software tools, and test and tweak your creations. This easy-to-follow book features new instruction on programmable logic, semiconductors, operational amplifiers, voltage regulators, power supplies, digital electronics, and more. Coverage includes:

- Resistors, capacitors, inductors, and transformers
- Diodes, transistors, and integrated circuits
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- Sensors, GPS modules, and touch screens
- Op amps, regulators, and power supplies
- Digital electronics, LCDs, and logic gates
- Microcontrollers and prototyping platforms
- Combinational and sequential programmable logic
- DC motors, RC servos, and stepper motors
- Microphones, audio amps, and speakers

Modular electronics and prototypes

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1. <https://www.amazon.com/Practical-Electronics-Inventors-Fourth-Scherz/dp/1259587541> [back]

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