

SC15MNX MBP Compressor R290 115V 60Hz

General

Code number	104H7570
Approvals	UL984
Compressors on pallet	80

Application

Application	MBP			
Frequency Motor type	Hz	60 CSR	60 CSIR	
Evaporating temperature	°F	-15 to 45	-15 to 45	
Voltage range	V	95 - 135	103 - 135	
Max. condensing temperature continuous (short)	°F	131 (149)	131 (149)	
Max. winding temperature continuous (short)	°F	257 (275)	257 (275)	

Cooling requirements

Frequency Motor type	Hz	60 CSR			60 CSIR		
Application		LBP	MBP	HBP	LBP	MBP	HBP
90°F		—	F ₂	—	—	F ₂	—
100°F		—	F ₂	—	—	F ₂	—
110°F		—	F ₂	—	—	F ₂	—
Remarks on application:							

Motor

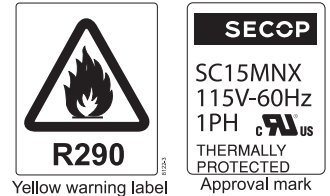
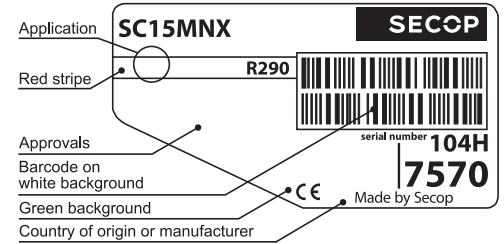
Motor type	CSIR/CSR			
LRA (rated after 4 sec. UL984), HST LST	A	57.0	—	
Cut in Current, HST LST	A	57.0	—	
Resistance, main start winding (77°F)	Ω	0.7	2.7	

Design

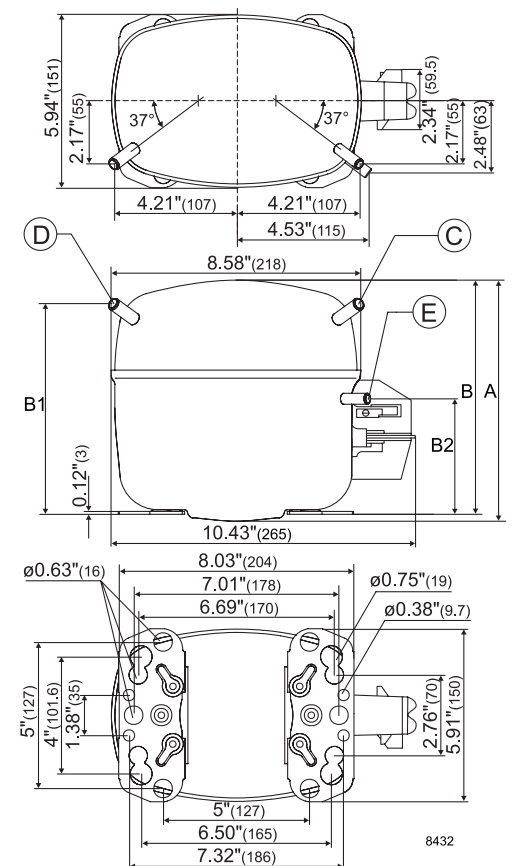
Displacement	cu.in	0.93
Oil quantity (type)	fl.oz.	20.3 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.4
Weight without electrical equipment	lbs.	31.3

Dimensions

Height		inch	A	8.62
			B	8.39
			B1	7.60
			B2	4.33
Suction connector	location, I.D. in. angle	C	0.378-0.385 37°	
	material comment		Copper Rubber plug	
Process connector	location, I.D. in. angle	D	0.252-0.259 37°	
	material comment		Copper Rubber plug	
Discharge connector	location, I.D. in. angle	E	0.252-0.259 37°	
	material comment		Copper Rubber plug	
Oil cooler connector	location, I.D. in. angle	F	—	
	material comment		—	
Remarks:				



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



ASHRAE MBP/HBP

 115V, 60Hz, CSR, fan cooling F₂

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h					1678	2213	2695	3139	3558	3970	4389	4830	5308	5839	6439	7122	7904
Power cons. in W					499	546	589	627	661	693	721	747	771	794	816	838	860
Current cons. in A					7.45	7.68	7.90	8.11	8.31	8.50	8.69	8.88	9.05	9.22	9.39	9.55	9.71
EER in BTU/Wh					3.36	4.05	4.58	5.01	5.38	5.73	6.09	6.46	6.88	7.35	7.89	8.50	9.19

ASHRAE MBP/HBP

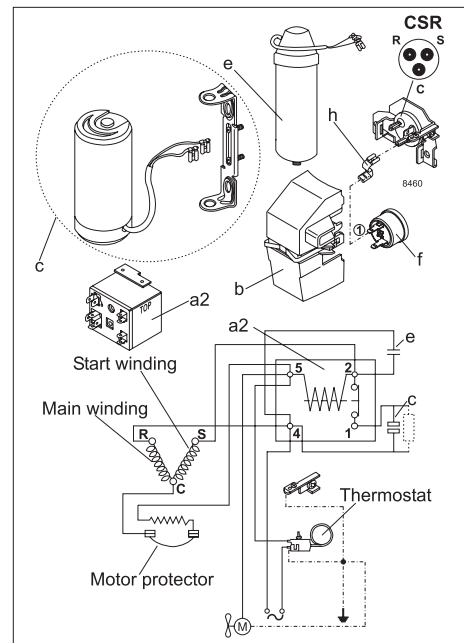
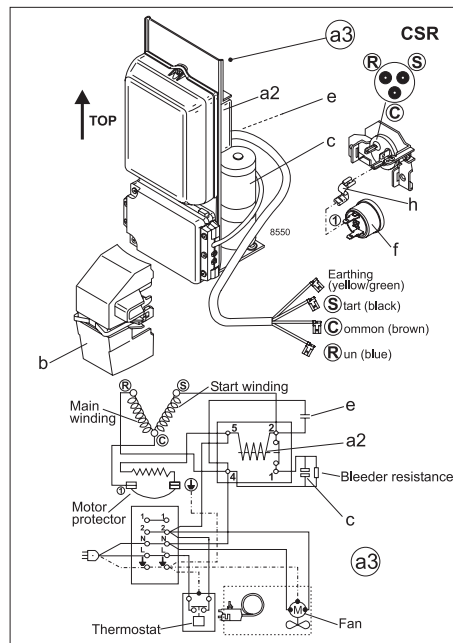
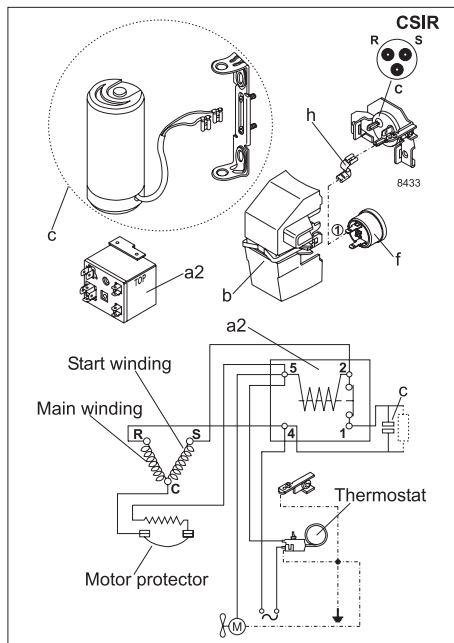
 115V, 60Hz, CSIR, fan cooling F₂

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h					1620	2168	2655	3100	3517	3923	4335	4769	5241	5767	6365	7050	7839
Power cons. in W					513	566	613	655	692	726	756	784	810	834	858	882	907
Current cons. in A					7.66	7.95	8.21	8.46	8.69	8.91	9.11	9.31	9.50	9.69	9.88	10.1	10.2
EER in BTU/Wh					3.16	3.83	4.33	4.73	5.08	5.41	5.73	6.08	6.47	6.91	7.42	7.99	8.64

ASHRAE LBP

 115V, 60Hz, CSR, fan cooling F₂

Evap. temp. in °F	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
Capacity in BTU/h					1877	2477	3018	3515	3987	4449	4921	5418	5957	6557	7234	8007	8892
Power cons. in W					504	552	595	634	669	700	729	756	780	804	826	848	871
Current cons. in A					7.45	7.68	7.90	8.11	8.31	8.50	8.69	8.88	9.05	9.22	9.39	9.55	9.71
EER in BTU/Wh					3.73	4.49	5.07	5.55	5.96	6.35	6.75	7.17	7.64	8.16	8.76	9.44	10.2



Accessories for	SC15MNX	Figure	Code number
Starting device assembly			
CSR	23.6 in. cable length	a3	117-7045
CSIR	23.6 in. cable length		117-7053
Starting device components			
Starting relay	1/4 in. spade connect.	a2	117-7441
Start. capacitor 410 µF	1/4 in. spade connect.	c	117U5043
Run capacitor 23.5 µF	1/4 in. spade connect.	e	117-7114
Cover		b	117U1021 *)
Protector		f	117U3212 *)
Protector holder		h	117U0439 *)
*) Remarks: Cover, protector, protector holder parts of compressor			

Test conditions	ASHRAE MBP/HBP	ASHRAE LBP
Condensing temp.	130°F	130°F
Ambient temperature	90°F	90°F
Suction gas temp.	95°F	90°F
Liquid temperature	115°F	90°F

Mounting accessories	Code number
Bolt joint for one comp.	Ø: 5/8 in. 118-1917
Bolt joint in quantities	Ø: 5/8 in. 118-1918
Snap-on in quantities	Ø: 5/8 in. 118-1919

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without substantial changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Nidec Global Appliance Germany GmbH. All rights reserved. www.secop.com