

SC18MNX MBP Compressor R290 115V 60Hz

General

Code number	104H7870
Approvals	UL984
Compressors on pallet	80

Application

Application	MBP			
Frequency Motor type	Hz	60 CSR	60 CSIR	
Evaporating temperature	°F	-10 to 45	-10 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		-	-	-	-	-	-
Remarks on application:							

Motor

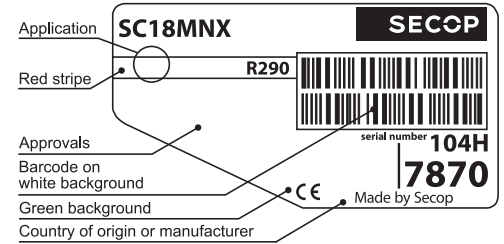
Motor type	CSIR/CSR		
LRA (rated after 4 sec. UL984), HST LST	A	64.0	-
Cut in Current, HST LST	A	64.0	-
Resistance, main start winding (77°F)	Ω	0.6	3.0

Design

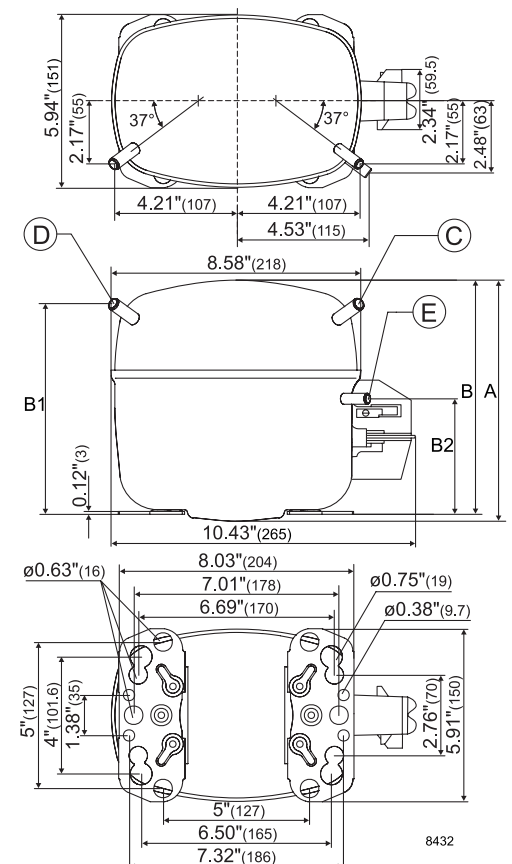
Displacement	cu.in	1.10
Oil quantity (type)	fl.oz.	18.6 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.4
Weight without electrical equipment	lbs.	31.3

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						2758	3135	3525	3936	4378	4860	5390	5979	6634	7367	8185	9098
Power cons. in W						657	692	727	761	794	828	860	893	925	958	990	1022
Current cons. in A						8.88	9.12	9.35	9.60	9.84	10.1	10.3	10.6	10.8	11.0	11.3	11.5
EER in BTU/Wh						4.20	4.53	4.85	5.17	5.51	5.87	6.26	6.69	7.17	7.69	8.27	8.90

ASHRAE MBP/HBP

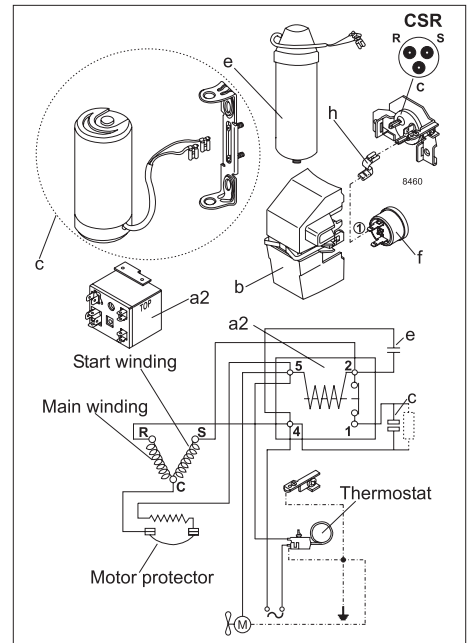
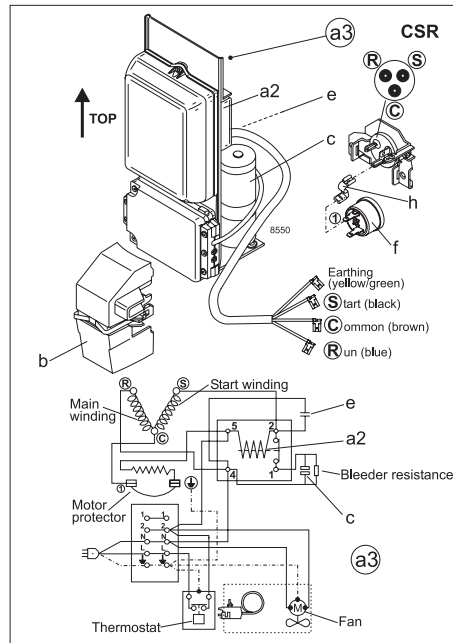
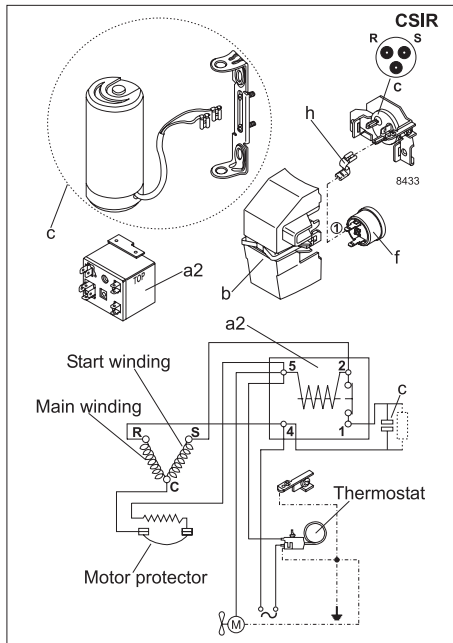
115V, 60Hz, CSIR, fan cooling F₂

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						2678	3054	3443	3854	4295	4775	5302	5884	6529	7248	8047	8936
Power cons. in W						691	729	765	801	837	872	906	940	974	1008	1042	1076
Current cons. in A						9.34	9.59	9.85	10.1	10.4	10.6	10.9	11.1	11.4	11.6	11.9	12.1
EER in BTU/Wh						3.87	4.19	4.50	4.81	5.13	5.48	5.85	6.26	6.70	7.19	7.72	8.30

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						3087	3510	3948	4410	4907	5449	6046	6710	7450	8277	9202	10236
Power cons. in W						664	699	734	769	803	837	870	903	936	969	1002	1035
Current cons. in A						8.88	9.12	9.35	9.60	9.84	10.1	10.3	10.6	10.8	11.0	11.3	11.5
EER in BTU/Wh						4.65	5.02	5.38	5.73	6.11	6.51	6.95	7.43	7.96	8.54	9.18	9.89



Accessories for	SC18MNX	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	117U3188 *)
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

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