

## Single Pack SCE18MNX 115V 60Hz CSCR

Single pack code number: **195B4279**

Position	Title	Code	Amount
1	Compressor SCE18MNX	104H7879	1
2	SC starting device (600mm)	117-7805	1
3	Bolt joint for one compressor   M6   ø16mm	118-1917	1

## Model

Designation	<b>SCE18MNX</b>	115V/60Hz 1~	Sales code:	<b>104H7879</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cSt	Displacement	17,68cm <sup>3</sup> / 1,08cu.in
Oil quantity	550cm <sup>3</sup> / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	450g / 15,9oz		
Free gas volume comp.	1460cm <sup>3</sup> / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	0,7Ω (at 25°C)		
Winding resistance aux	2,81Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



## General - Configurations with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSCR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL, EAC	UL, EAC
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

## Applications with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R290	R290
Application	MBP	MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	23,5μF	-/-
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s/ U(N))	56,6A	55,9A
RLA (rated load amps / 1s/ U(N))	8,98A	9,87A
Cut in current (U(N))	56,6A	55,9A

## Model

Designation

**SCE18MNX**

115V/60Hz 1~

Sales code:

**104H7879**

## Compressor dimensions

Housing	A Height	219mm / 8,62in
	B Height	213mm / 8,39in
	C Length shell	218mm / 8,58in
	D Length w. cover	255mm / 10,04in
	E Width	151mm / 5,94in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-107/193/55
	[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



## Compressor fixation

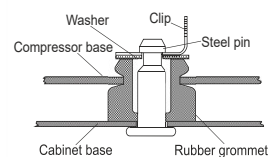


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

## Bolt joint



## Snap-on



## Mounting accessories

Mounting accessories	one comp.	multi pack
Bolt joint   M6   ø16mm	118-1917	118-1918
Bolt joint   ø1/4"   ø16mm	118-1946	
Bolt joint   ø1/4"   ø19mm	118-1949	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

## Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

## Model

Designation	<b>SCE18MNX</b>	<b>115V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104H7879</b>
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## Configuration

Motor configuration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL EAC

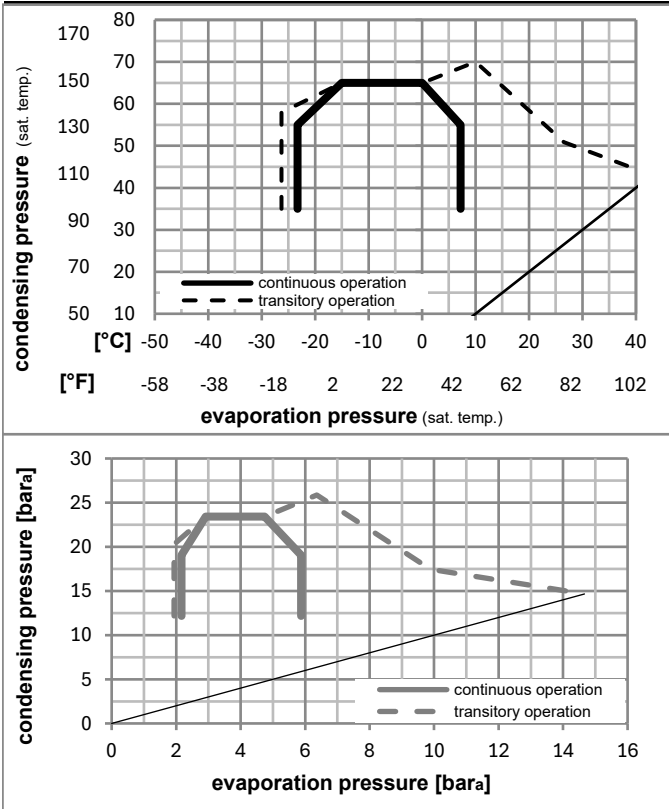
## Electrical accessories / wiring diagram



## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

## Operation pressure range



## Components (protector (f)+ holder (h)+ cover (b): pre assembled)

a3	SC starter kit (600mm)	117-7805
h	protector holder	117U0439
f	ext. protector (T0803)	117U3220
b	plastic cover + clamp	117U1021

## Alternative comp.

a2	potential relay (RVA 7AB3R A39)	117-7443
e	run capacitor (23,5μF, 6.3mm)	117-7133
c	start capacitor (410μF, 6.3mm)	117U5379

### Model

Designation **SCE18MNX** **115V/60Hz** Conf. 1 Sales code: **104H7879**

### Optimization + standard conditions

R290, 115V/60Hz, CSCR, fan 3m/s, UL, EAC

		Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption				
		Condensing pressure (saturation temperature)									Current consumption		Ref. mass flow		
		Return gas temp.									I		m		
		Liquid temp.													
		Cooling capacity													
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]	
-7	20	54	130	35	95	1796,7	6136	1546,3	2,13	7,26	1,83	845,0	8,43	20,50	ASHRAE MBP
-10	14	55	131	32	90	1421,4	4854	1223,2	1,76	6,03	1,52	805,5	8,13	17,98	cecomaf MBP
-10	14	45	113	20	68	1595,5	5449	1373,1	2,16	7,38	1,86	738,2	7,73	19,59	EN12900 MBP
-7	20	49	120	18	65	1697,2	5796	1460,6	2,12	7,25	1,83	799,6	8,18	22,04	ARI540 MBP
-10	14	45	113	32	90	1661,0	5673	1429,5	2,25	7,68	1,94	738,2	7,73	19,00	opt
-25	-13	45	113	32	90	847,9	2896	729,7	1,48	5,04	1,27	574,5	6,28	9,56	opt

### Performance tables

R290, 115V/60Hz, CSCR, fan 3m/s, UL, EAC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-25	-13	847,9	2896	729,7	1,48	5,04	1,27	574,5	6,28	9,56
cond. pressure	-23	-10	926,0	3162	796,9	1,55	5,31	1,34	595,8	6,48	10,46
pc= 45/113	-15	5	1358,9	4641	1169,5	1,97	6,72	1,69	690,2	7,33	15,46
return gas temp.	-9	15	1696,9	5795	1460,4	2,28	7,80	1,96	743,2	7,77	19,43
RGT= 32/90	-4	25	2084,3	7118	1793,8	2,64	9,02	2,27	789,3	8,14	24,04
liquid temp	0	32	2389,6	8161	2056,5	2,92	9,98	2,51	818,0	8,37	27,72
Tliq= 45/113	7,2	45	3041,9	10389	2617,9	3,52	12,01	3,03	864,7	8,71	35,74
[°C / °F]	-25	-13	658,0	2247	566,3	1,19	4,05	1,02	554,5	6,33	8,19
cond. pressure	-23	-10	735,7	2512	633,1	1,25	4,28	1,08	587,2	6,56	9,17
pc= 55/131	-15	5	1147,4	3919	987,5	1,57	5,35	1,35	732,2	7,60	14,43
return gas temp	-9	15	1453,4	4964	1250,8	1,79	6,10	1,54	813,0	8,19	18,40
RGT= 32/90	-4	25	1794,6	6129	1544,4	2,03	6,95	1,75	882,4	8,71	22,90
liquid temp	0	32	2059,0	7032	1772,0	2,23	7,61	1,92	924,6	9,04	26,45
Tliq= 55/131	7,2	45	2616,8	8937	2252,0	2,64	9,02	2,27	990,4	9,61	34,09

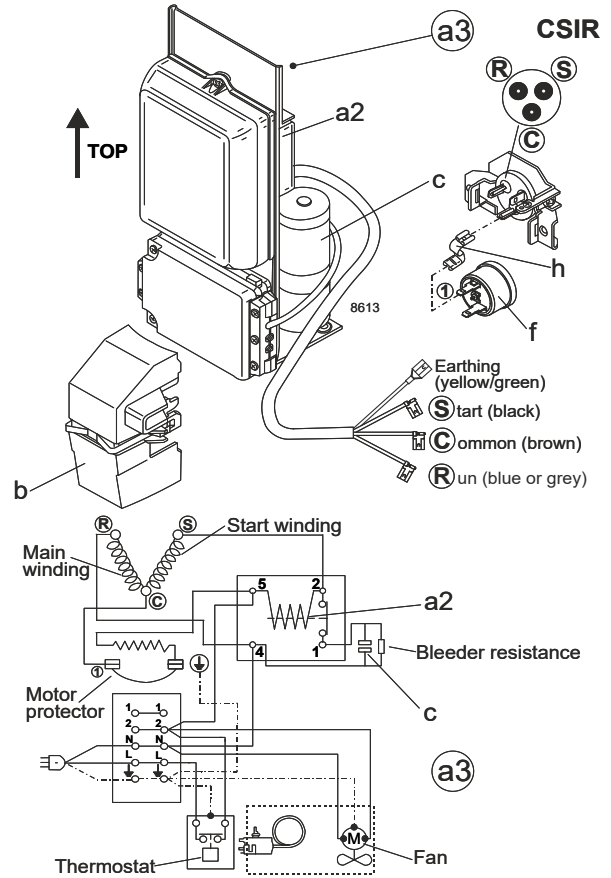
## Model

Designation	<b>SCE18MNX</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104H7879</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL EAC

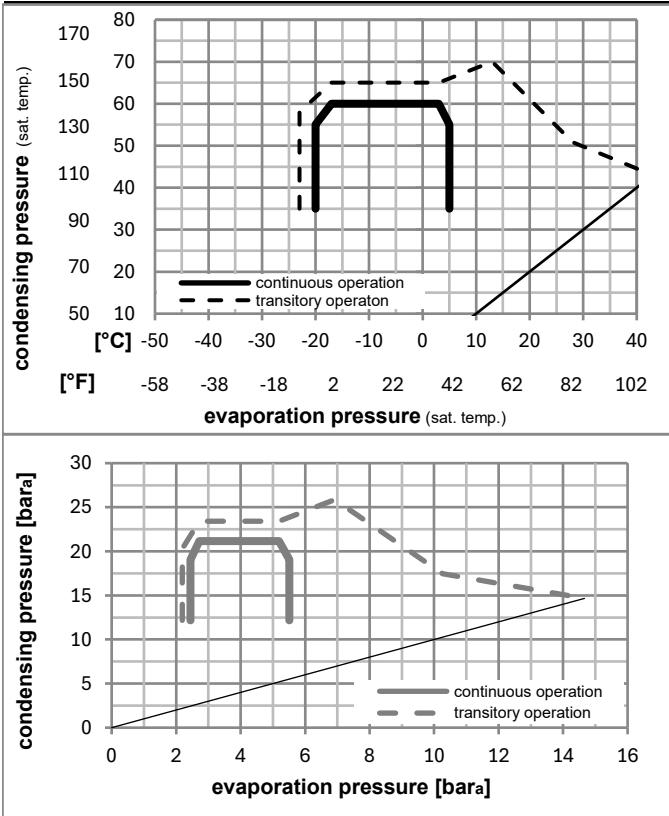
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b	plastic cover + clamp	117U1021

## Alternative comp.

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c	start capacitor (410µF, 6.3mm)	117U5379

### Model

Designation **SCE18MNX** **115V/60Hz** Conf. 2 Sales code: **104H7879**

### Optimization + standard conditions

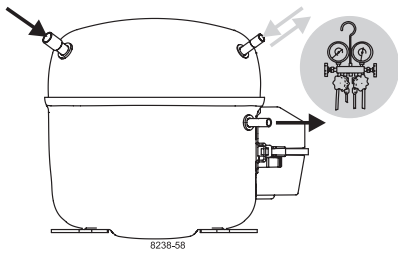
R290, 115V/60Hz, CSIR, fan 3m/s, UL, EAC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP	EER		P1	I	m				
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-7	54	35	46	1783,7	6092	1535,1	1,98	6,78	1,71	898,8	10,38	20,35	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	1411,1	4819	1214,4	1,65	5,62	1,42	856,8	10,01	17,85	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	1584,0	5410	1363,2	2,02	6,89	1,74	785,2	9,52	19,45	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-7	49	18	49	1684,9	5754	1450,1	1,98	6,77	1,70	850,5	10,07	21,88	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	1649,0	5632	1419,1	2,10	7,17	1,81	785,2	9,52	18,86	opt	
[°F]	14	113	90	113											
[°C]	-25	45	32	45	841,8	2875	724,5	1,38	4,70	1,19	611,1	7,74	9,49	opt	
[°F]	-13	113	90	113											

### Performance tables

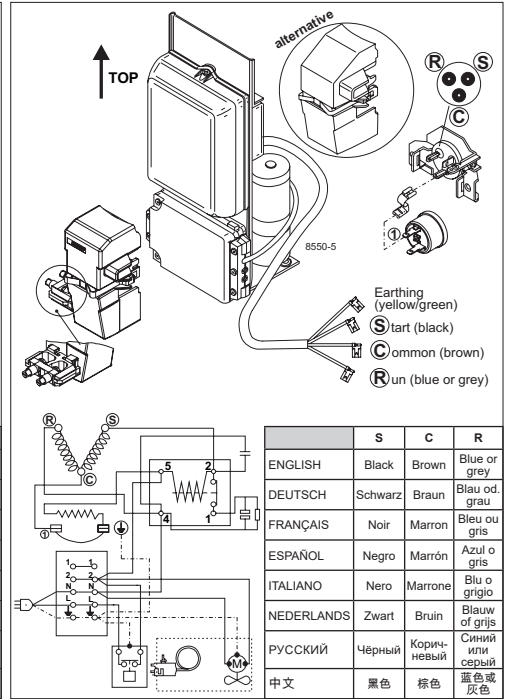
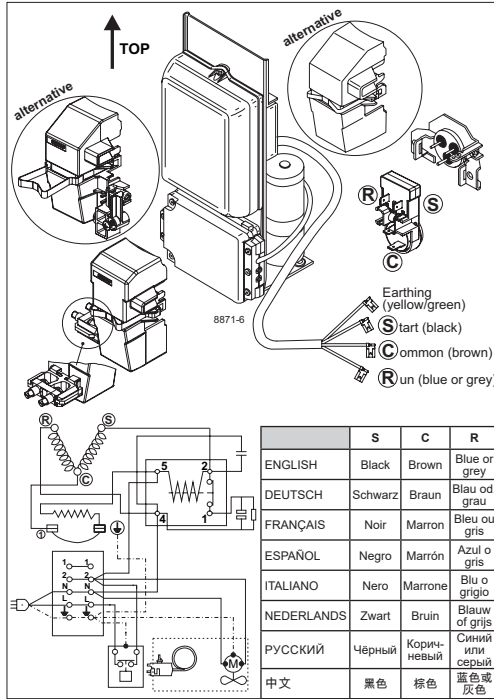
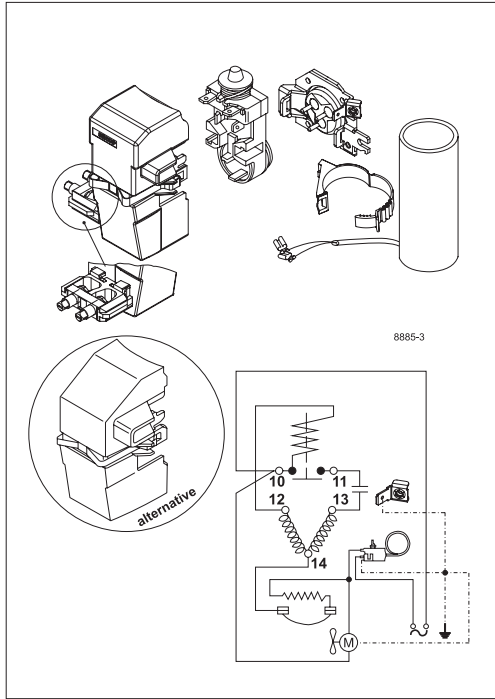
R290, 115V/60Hz, CSIR, fan 3m/s, UL, EAC

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-20	-4	1082,1	3696	931,3	1,60	5,46	1,38	676,4	8,43	12,25
cond. pressure	-15	5	1349,1	4607	1161,0	1,84	6,28	1,58	734,2	9,02	15,35
pc= 45/113	-9	15	1684,6	5753	1449,8	2,13	7,28	1,83	790,5	9,57	19,29
return gas temp.	-7	20	1870,3	6387	1609,6	2,29	7,83	1,97	815,9	9,81	21,49
RGT= 32/90	-4	25	2069,3	7067	1780,8	2,46	8,42	2,12	839,5	10,03	23,86
liquid temp	0	32	2372,3	8102	2041,6	2,73	9,31	2,35	870,1	10,30	27,52
Tliq= 45/113	5	41	2808,1	9590	2416,7	3,10	10,59	2,67	905,3	10,61	32,85
[°C / °F]	-20	-4	888,6	3035	764,7	1,29	4,40	1,11	690,1	8,62	11,11
cond. pressure	-15	5	1139,1	3890	980,3	1,46	5,00	1,26	778,8	9,36	14,32
pc= 55/131	-9	15	1442,9	4928	1241,8	1,67	5,70	1,44	864,8	10,08	18,27
return gas temp	-7	20	1607,4	5489	1383,3	1,78	6,08	1,53	903,2	10,41	20,43
RGT= 32/90	-4	25	1781,6	6085	1533,3	1,90	6,48	1,63	938,6	10,72	22,74
liquid temp	0	32	2044,1	6981	1759,2	2,08	7,10	1,79	983,5	11,14	26,25
Tliq= 55/131	5	41	2417,5	8256	2080,5	2,34	7,99	2,01	1033,7	11,63	31,35



# SCE Compressors

## (External Protector)



	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色

	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
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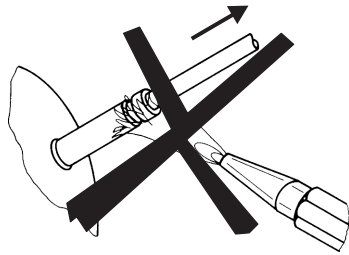




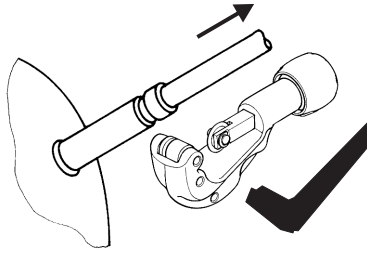
# SCE Compressors (External Protector)



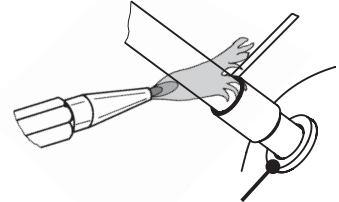
## Service/Repair – R290



8545



## Brazing on Suction Connectors (Direct Intake)



**! max. 350°C/662°F !  
at socket**  
brazing solder: phosphor (LP7) or silver

8882

Refer to Product Bulletin:  
**Brazing on Suction Connectors**  
(SCE Compressors with Direct Suction Intake)

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