Single
Packs

Single Pack KLF4.8CND 220-240V 50Hz CSIR

Single pack code number: **195B4594**

Position	Title	Code	Amount
1	Compressor KLF4.8CND	106H2500	1
2	Starting relay (QLZ-4.6A, overload protector T1189/L6)	117U7073	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5001	1
4	KL accessories	103N1060	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • **www.secop.com**

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop 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 subsequential 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 Secop GmbH. All rights reserved.

Model
KLF4.8CND

Sales code:
106H2500

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**200g / 7.05oz**
Weight	**9.20 kg / 20.28lbs**
Displacement	**4.80 cm3 / 0.29cu.in**
Compressors on pallet	**100**

General – Configurations With KLF4.8CND

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	RSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CCC	VDE, CCC
Starting torque	HST	LST
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

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

Model
KLF4.8CND

Sales code:
106H2500

Compressor Design

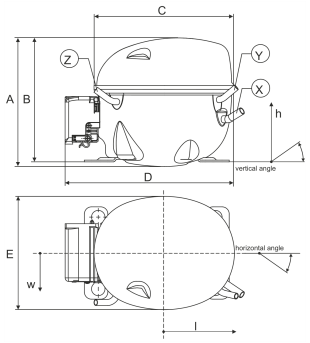
Oil type	**POE**	Winding resistance main	**13.1 Ohm**
Oil viscosity	**9,7cSt**	Winding resistance aux	**25.3 Ohm**
Oil quantity	**165 / 5.58fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,615 cm3 / 54.61fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

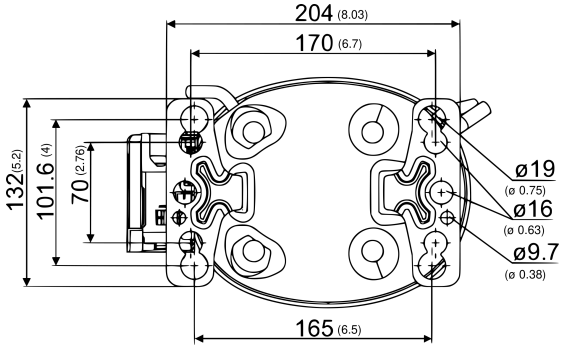
A Height	**182mm / 7.17in**
B Height	**175mm / 6.89in**
C Length shell	**198mm / 7.80in**
D Length w. cover	**238mm / 9.37in**
E Width	**160mm / 6.30in**

Find 3D Model here



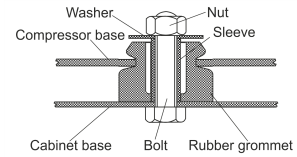
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	35°	13°	0°
Vertical angle ±2°	30°	40°	145°
Position l/h/w [mm]	119/73/59 / 4.69/2.87/2.32in	117/107/66 / 4.61/4.21/2.60in	-88/101/71 / -3.46/3.98/2.80in
Straight tube l. [mm]	13.5 / 0.53in	13.5 / 0.53in	13.5 / 0.53in

Mounting Accessories

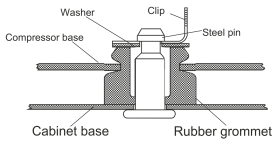


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
KLF4.8CND Configuration 1

Sales code:
106H2500

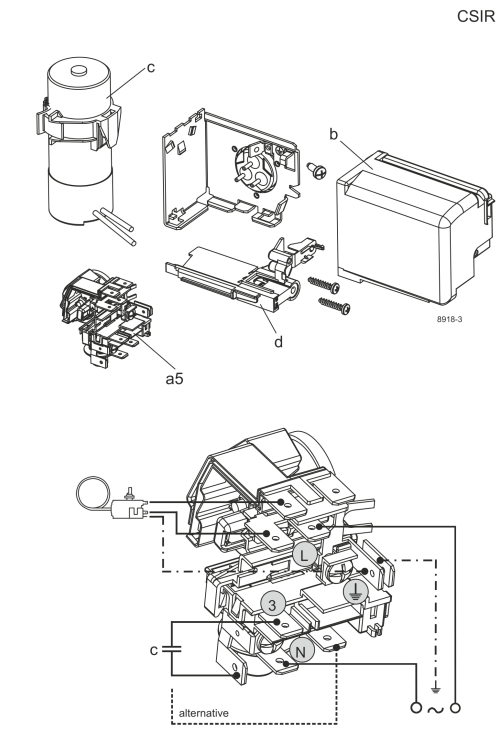
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

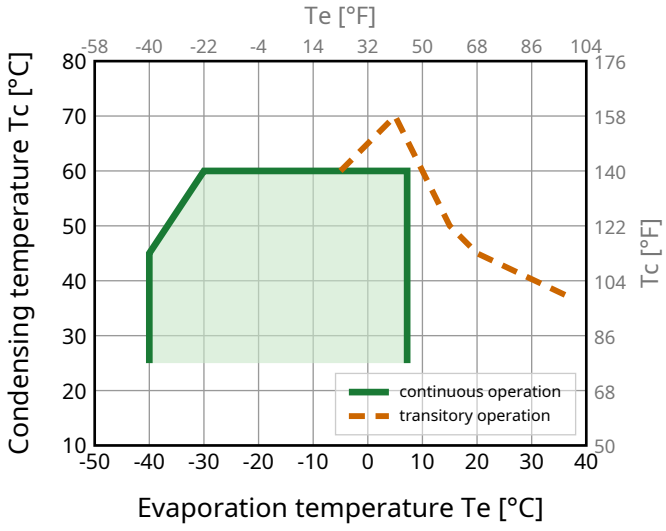


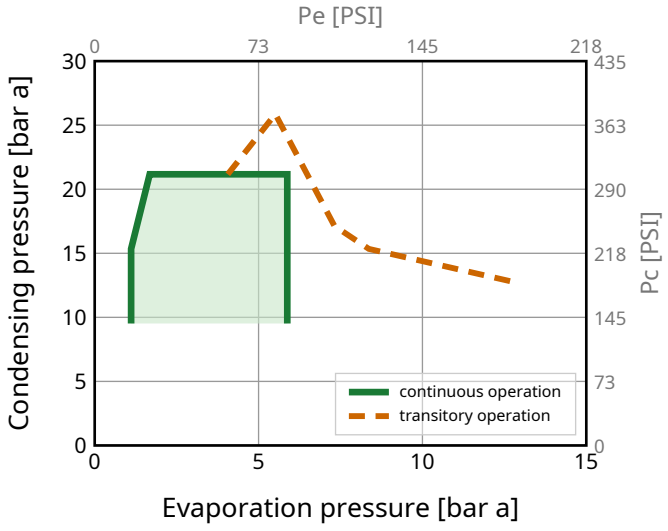
View full size

Components
a5 current relay (T1189/L6-S3) 117U7073
c start capacitor (80µF, 6.3mm) 117U5001
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components
b, d 100x cover + clamp + screws (5VA) 103N2060
b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range





Model
KLF4.8CND Configuration 1

Sales code:
106H2500

Standard Conditions

R290, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**231**	789	199	**1.51**	5.14	154	1.07	2.35	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**171**	585	147	**1.15**	3.93	149	1.06	2.15	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**127**	433	109	**1.07**	3.66	118	0.98	1.46	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**410**	1399	353	**2.07**	7.05	198	1.22	4.70	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**326**	1112	280	**1.71**	5.82	191	1.20	4.14	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**368**	1256	317	**2.13**	7.27	173	1.13	4.53	**EN12900 MBP**

Performance Tables

R290, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	**79**	268	68	**0.73**	2.49	108	0.96	0.88
-30	-22	**161**	550	139	**1.22**	4.17	132	1.01	1.82
-20	-4	**258**	880	222	**1.68**	5.74	154	1.07	2.94
-10	14	**383**	1306	329	**2.22**	7.56	173	1.13	4.39
0	32	**549**	1873	472	**2.90**	9.89	189	1.19	6.38
7.2	45	**702**	2394	603	**3.51**	11.99	200	1.23	8.26

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	**52**	177	45	**0.51**	1.73	102	0.94	0.64
-30	-22	**130**	443	112	**0.97**	3.31	134	1.02	1.62
-20	-4	**217**	740	186	**1.33**	4.52	163	1.10	2.73
-10	14	**326**	1112	280	**1.71**	5.82	191	1.20	4.14
0	32	**471**	1607	405	**2.17**	7.41	217	1.29	6.07
7.2	45	**605**	2065	521	**2.58**	8.82	234	1.36	7.91

Model
KLF4.8CND Configuration 2

Sales code:
106H2500

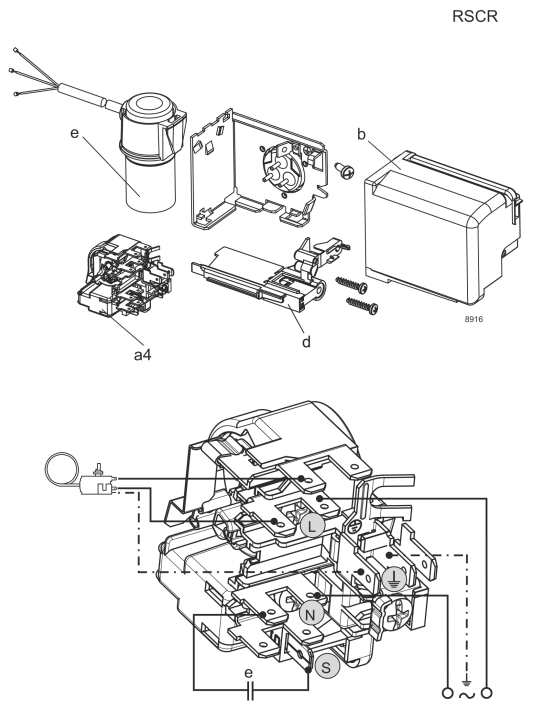
Configuration

Motor configuration	**RSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**PTC**
Run capacitor	**5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**10.2 A**
RLA (rated load amps / 1s/ U(N))	**1.4 A**
Cut in current (U(N))	**12.65 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

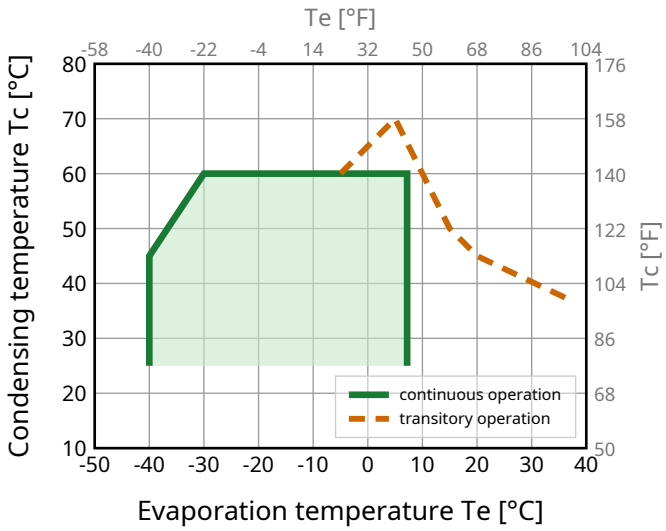


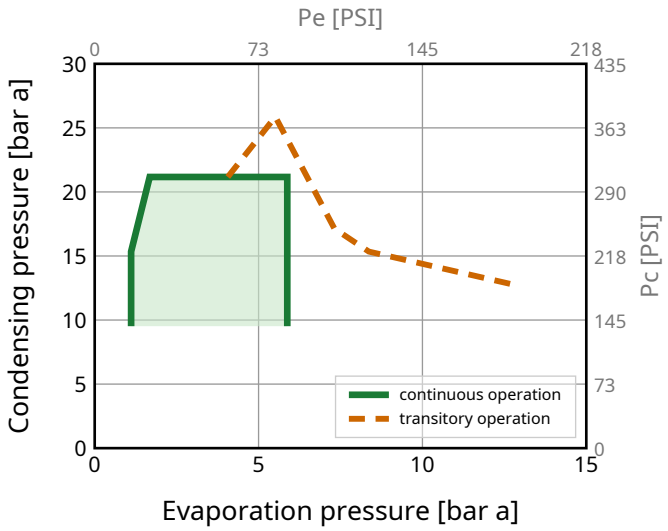
View full size

Components
a4 DAS3 (PTC,6.3mm, T1189/L6 - S3) 103N0254
e run capacitor (5µF, 6.3mm) 117-7191
b, d cover + clamp + screws (5VA-compl.) 103N0600

Alternative components
a4 ZAS3 (PTC,4.8mm, T1189/L6 - S3) 103N0255
e run capacitor (5µF, 4.8mm) 117-7190
b, d 100x cover + clamp + screws (5VA) 103N2060
b, d cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range





Model
KLF4.8CND Configuration 2

Sales code:
106H2500

Standard Conditions

R290, 220 V/50 Hz, RSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**232**	790	199	**1.56**	5.32	149	0.78	2.35	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**172**	585	148	**1.19**	4.06	144	0.77	2.15	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**127**	433	109	**1.09**	3.73	116	0.66	1.46	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**411**	1403	354	**2.17**	7.40	190	0.95	4.71	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**327**	1115	281	**1.79**	6.09	183	0.92	4.15	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**369**	1258	317	**2.22**	7.57	166	0.85	4.54	**EN12900 MBP**

Performance Tables

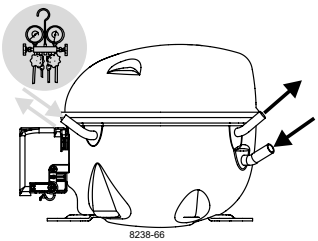
R290, 220 V/50 Hz, RSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	**79**	269	68	**0.74**	2.53	106	0.62	0.89
-30	-22	**161**	550	139	**1.25**	4.28	129	0.70	1.82
-20	-4	**258**	882	222	**1.74**	5.93	149	0.78	2.94
-10	14	**383**	1308	330	**2.31**	7.87	166	0.85	4.40
0	32	**550**	1877	473	**3.03**	10.35	181	0.92	6.39
7.2	45	**703**	2400	605	**3.69**	12.58	191	0.96	8.27

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	**52**	177	45	**0.51**	1.75	101	0.60	0.65
-30	-22	**130**	444	112	**1.00**	3.40	130	0.71	1.62
-20	-4	**217**	741	187	**1.38**	4.70	158	0.82	2.73
-10	14	**327**	1115	281	**1.79**	6.09	183	0.92	4.15
0	32	**472**	1611	406	**2.29**	7.82	206	1.02	6.09
7.2	45	**607**	2071	522	**2.74**	9.35	222	1.09	7.93



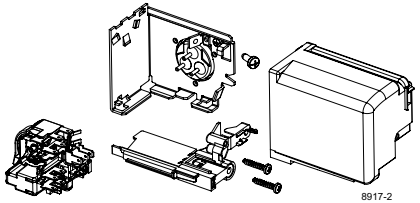
KL Compressors

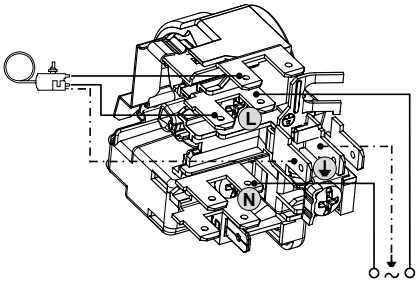
SECOP

Keep electrical equipment clear from oil, chemicals, and water

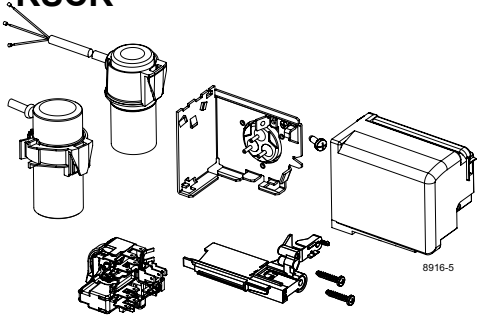
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

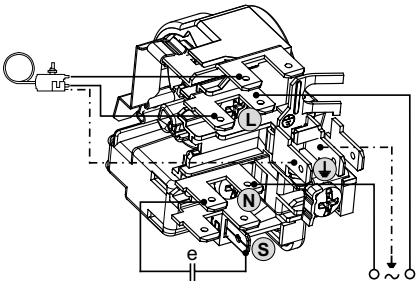
RSIR



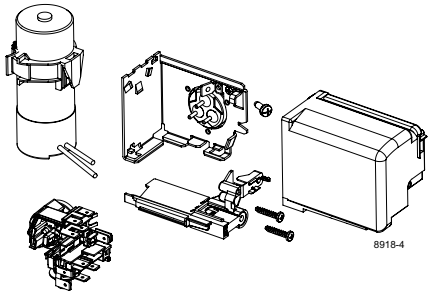


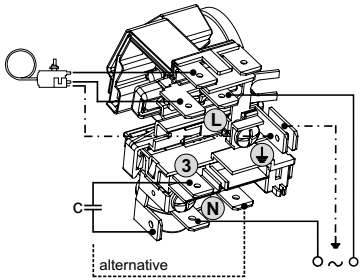
RSCR

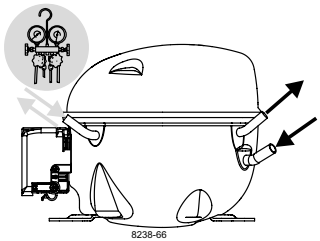




CSIR







KL Compressors

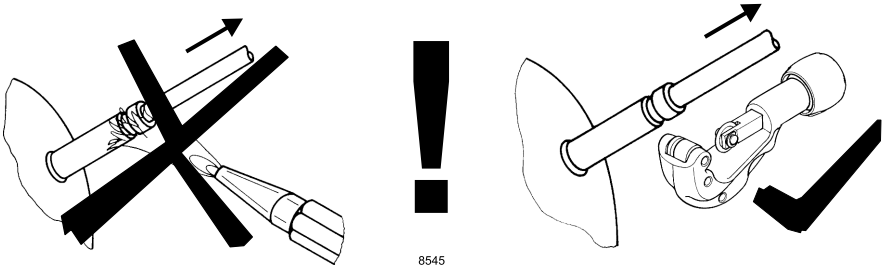
SECOP

Keep electrical equipment clear from oil, chemicals, and water

When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**