700 SERIES "ICE CUBE" POWER RELAYS

c UL us
UL Recognized
File No. E43641

40787

TÜV

CE

COMPLIES WITH REQUIREMENTS OF

* IEC STANDARDS 947-4-1 AND 947-5-1 LOW VOLTAGE DIRECTIVE
* IEC = INTERNATIONAL ELECTROTECHNICAL COMMISSION
* CE TESTING AND EVALUATION PERFORMED BY THE UNDERWRITERS LABORATORIES AS A THIRD PARTY PARTICIPANT

c UL us
LISTED 367G
IND. CONT. EQ.

WHEN USED WITH SOCKETS:
781:**70-781D-1**
782:**70-782D-1**
70-459-1
70-461-1
783:**70-783D-1**
784:**70-784D-1**

CURRENT LIMITED TO RATING OF RELAY OR SOCKET WHICHEVER IS LESS

FEATURES	BENEFITS
FLAG INDICATOR:	SHOWS RELAY STATUS IN MANUAL OR POWERED CONDITION.
BI - POLAR L.E.D. STATUS LAMP:	ALLOWS FOR REVERSE POLARITY APPLICATIONS, SHOWS COIL "ON" OR "OFF" STATUS. IDEAL IN LOW LIGHT CONDITIONS.
COLOR CODED PUSH BUTTON:	IDENTIFIES AC COILS WITH RED OR DC COILS WITH BLUE PUSH BUTTONS. ALLOWS FOR MANUAL OPERATION OF RELAY WITHOUT THE NEED FOR COIL POWER. IDEAL FOR FIELD SERVICE PERSONNEL TO TEST CONTROL CIRCUITS.
LOCK-DOWN DOOR:	WHEN ACTIVATED, HOLDS PUSH BUTTON AND CONTACTS IN THE OPERATE POSITION. EXCELLENT FOR ANALYZING CIRCUIT PROBLEMS.
FINGER - GRIP COVER:	ALLOWS OPERATOR TO REMOVE RELAYS FROM SOCKETS MORE EASILY THAN CONVENTIONAL RELAYS.
WHITE PLASTIC I.D. TAG/WRITE LABEL:	USED FOR IDENTIFICATION OF RELAYS IN MULTI-RELAY CIRCUITS.
COVER ADAPTERS:	DIN RAIL ADAPTER OR TOP/BOTTOM FLANGE ADAPTER, ALLOWS THE 700 RELAYS TO BE DIRECT MOUNTED TO A DIN RAIL OR PANEL.

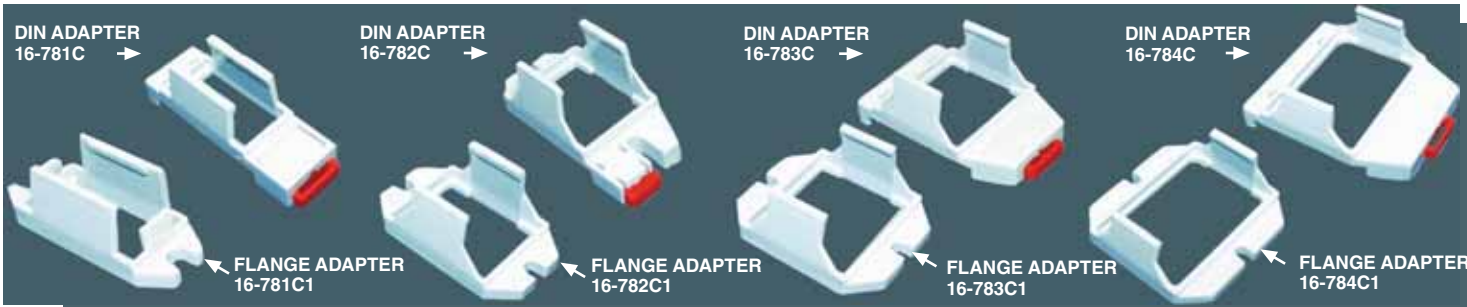
MANUFACTURED UNDER ISO 9002 & QS 9000

781
SPDT
15 AMPS

782
SPDT
20 AMPS
DPDT
15 AMPS

783
3PDT
15 AMPS

784
4PDT
15 AMPS



OPTIONAL ADAPTERS ORDERED SEPARATELY

PHONE: (843) 393-5778 FAX: (843) 393-4123 EMAIL: info@magnecraft.com

GENERAL SPECIFICATIONS (@ 25°C)

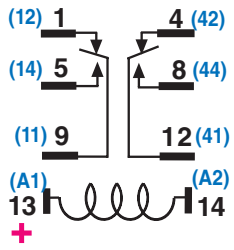
	UNITS	781XAX	782XAX	782XBX	783	784
COIL						
Pull-in Voltage AC (50/60 Hz):≤	% of nominal	85	85	85	85	85
Pull-in Voltage DC:≤	% of nominal	80	80	80	80	80
Dropout Voltage AC (50/60 Hz):≥	% of nominal	10	10	10	10	10
Dropout Voltage DC:≥	% of nominal	10	10	10	10	10
Maximum Voltage:	% of nominal	110	110	110	110	110
Resistance:	% ±	15	15	15	15	15
Coil Power AC (60 Hz):	VA	0.9	1.2	1.2	1.5	1.5
Coil Power DC:	W	0.7	0.9	0.9	1.7	2
Insulation System Per UL Standard 1446:		Class B (130 °C)	Class B (130 °C)	Class B (130 °C)	Class B (130 °C)	Class B (130 °C)
Maximum Coil Dissipation, AC (60 Hz):	VA	2.55	2.55	2.55	3	3
Maximum Coil Dissipation, DC:	W	2.3	2.3	2.3	3.4	2.3
Duty:		Continuous	Continuous	Continuous	Continuous	Continuous
CONTACTS						
Contact Material:		Silver alloy, gold flashed	Silver alloy, gold flashed	Silver alloy, gold flashed	Silver alloy, gold flashed	Silver alloy, gold flashed
Contact Rating AC Amperes (AC1):	A	15	20	15 / 12	15 / 12	15 / 12
Contact Rating AC Voltage:	V	277	277	120 / 277	120 / 277	120 / 277
Contact Rating DC Amperes (DC1):	A	15 / 0.5	20 / 0.5	12 / 0.5	15/ 0.5	15 / 0.5
Contact Rating DC Voltage:	V	28 / 220	28 / 220	28 / 220	28 / 220	28 / 220
General Purpose Rating (75%-80% pf):	A @ V	10 @ 240				
Horse Power (AC):	HP	1/2 @ 120 V	1/2 @ 120 V	1/2 @ 120 V	1/2 @ 120 V	1/2 @ 120 V
Horse Power (AC):	HP	1 @ 250 V	1 @ 250 V	1 @ 250 V	3/4 @ 250 V	3/4 @ 250 V
Pilot Duty (60 Hz):		B300	B300	B300	B300	B300
Utilization Category:	IEC	AC15	AC15	AC15	AC15	AC15
VA Rating Make:	VA	3600	3600	3600	3600	3600
VA Rating Break:	VA	360	360	360	360	360
Minimum Recommended Load:	ma	100 @ 5 VDC or 0.5 W	100 @ 5 VDC or 0.5 W	100 @ 5 VDC or 0.5 W	100 @ 5 VDC or 0.5 W	100 @ 5 VDC or 0.5 W
TIMING						
Operate Time:	ms	20	20	25	25	20
Release Time:	ms	20	20	20	20	20
DIELECTRIC STRENGTH						
Coil to Contacts:	V rms	2500	2500	2500	2500	2500
Across Open Contacts:	V rms	1500	1500	1000	1000	1000
Pole to Pole:	V rms			2500	2500	2500
Insulation Resistance:	megohms minimum @ VDC	100 @ 500	100 @ 500	100 @ 500	100 @ 500	100 @ 500
VIBRATION RESISTANCE						
Functional:	g's	10-55 Hz, 6 g's,1mm double amplitude	10-55 Hz, 6g's 1mm double amplitude	10-55 Hz, 6g's 1mm double amplitude	10-55 Hz, 6g's 1mm double amplitude	10-55 Hz, 6g's1mm double amplitude
SHOCK RESISTANCE						
Functional:	g's	10	10	10	10	10
TEMPERATURE						
Operating, AC Lower:	°C	-40	-40	-40	-40	-40
Operating, AC Upper:	°C	+70	+70	+70	+70	+70
Operating, DC Lower:	°C	-40	-40	-40	-40	-40
Operating, DC Upper:	°C	+70	+70	+70	+70	+70
Storage, Lower:	°C	-40	-40	-40	-40	-40
Storage, Upper:	°C	+105	+105	+105	+105	+105
LIFE EXPECTANCY						
Electrical @ Rated Load (AC1):	operations	15 A: 100,000 20 A: 50,000	100,000	200,000	150,000	150,000
Mechanical @ no Load :	operations	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
MISCELLANEOUS						
Operating Position:		Any	Any	Any	Any	Any
Insulation Material:	94V-0	Molded plastic	Molded plastic	Molded plastic	Molded plastic	Molded plastic
Enclosure Material:	94V-0	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Cover Protection Category:	IP	40	40	40	40	40
Terminals:	Inch (mm)	0.187, 0.1, 0.08 x 0.020 (4.47, 2.54, 2.03 x 0.508)	0.187, 0.08 x 0.020 (4.47, 2.03 x 0.508)	0.187, 0.08 x 0.020 (4.47, 2.03 x 0.508)	0.187, 0.08 x 0.020 (4.47, 2.03 x 0.508)	0.187, 0.08 x 0.020 (4.47, 2.03 x 0.508)
Weight:	grams	29	36	36	60	80

9/04

782/78 - 2 POLE "ICE CUBE" POWER RELAYS

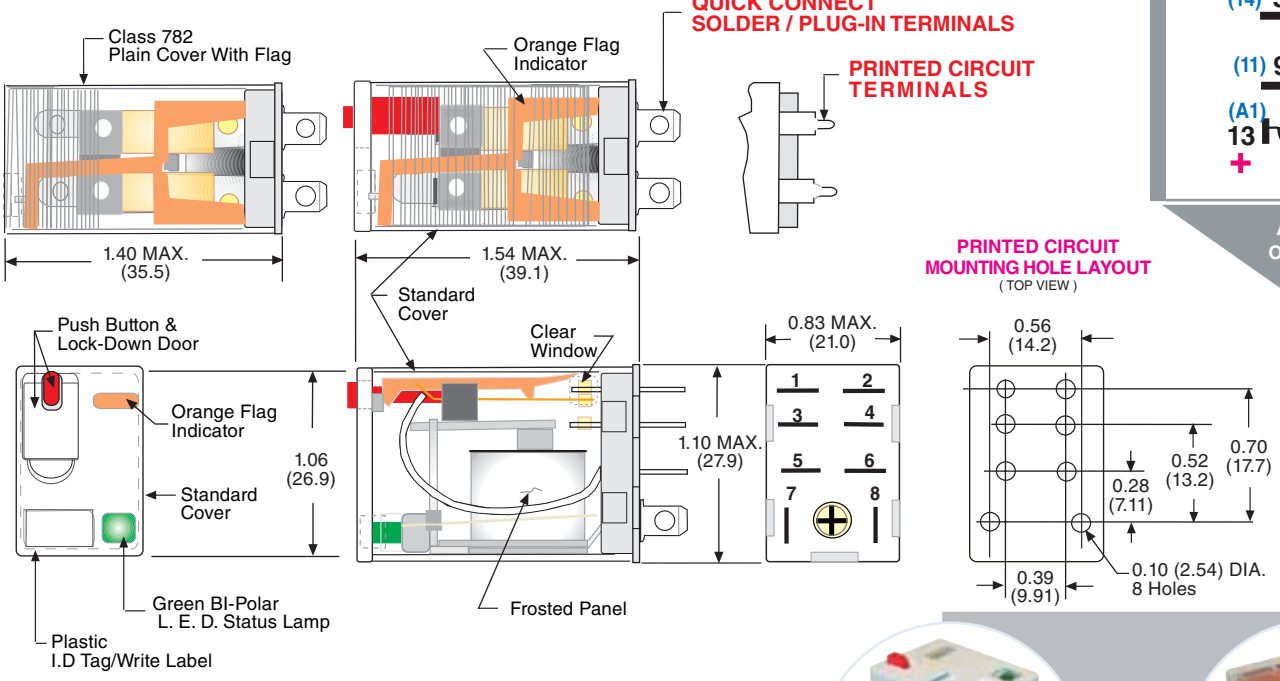
DPDT, 15 AMPS

WIRING DIAGRAM
(VIEWED FROM PIN END)



ALTERNATE NEMA OR IEC ( ) NUMBERS VIEWED FROM PIN SIDE

OUTLINE DIMENSIONS
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



PRINTED CIRCUIT MOUNTING HOLE LAYOUT
(TOP VIEW)

ORDERING CODE

782	XBX			M4L	-120A

CLASS:

CONTACT CONFIGURATION:
DPDT: **XBX**

OPTIONAL PLAIN COVER:
CODE C

TERMINAL STYLE:
QUICK CONNECTSOLDER/
PLUG-IN TERMINALS: **NO CODE**
PRINTED CIRCUIT TERMINALS:
CODE T

FULL FEATURED VERSION:
PUSH BUTTON &
LOCK-DOWN DOOR: **CODE M4**
BI - POLAR L.E.D. STATUS LAMP: **CODE L**

OPTIONAL FULL FEATURED DELETION:
PUSH BUTTON WITHOUT
LOCK-DOWN DOOR: **CODE M**

OPTIONAL PLAIN COVER FEATURES:
PUSH BUTTON WITHOUT
LOCK-DOWN DOOR: **CODE M**
POLARIZED L.E.D. STATUS LAMP: **CODE L**
(OBSERVE POLARITY+)

COIL VOLTAGE:
6, 12, 24, 120, 220/230, 240 **ADD "A" FOR AC COILS**
6, 12, 24 ,48, 110 **ADD "D" FOR DC COILS**

Mating Sockets
70-782D-1, 70-459-1: SCREW/DIN
70-402-1: PRINTED CIRCUIT
70-401-1: SOLDER TERMINAL
See section 7

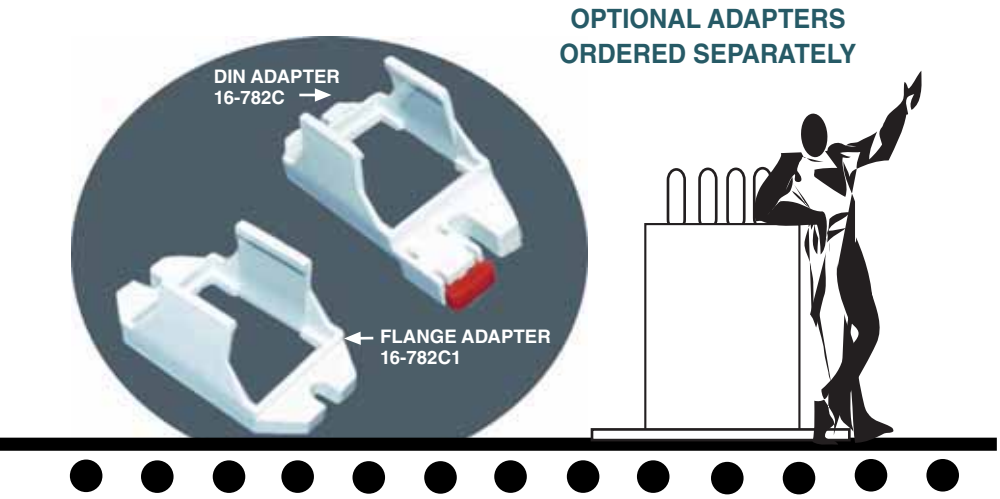
STANDARD PART NUMBERS			COIL MEASURED @ 25°C	
FULL FEATURED	PLAIN COVER WITH FLAG		NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
SOLDER/PLUG -IN, 15 AMP				
	DUAL MARKED			
	NEW PART NUMBER	SUPERCEDES		
	782XBXC-6A	W78ARCSX-7	6 VAC, 50/60Hz	9.6 Ω
782XBXM4L-24A	782XBXC-24A	W78ARCSX-9	24 VAC, 50/60Hz	180 Ω
782XBXM4L-120A	782XBXC-120A	W78ARCSX-11	110/120 VAC, 50/60Hz	4,430 Ω
782XBXM4L-220/230A			220/230 VAC, 50/60Hz	15,000 Ω
782XBXM4L-240A	782XBXC-240A	W78ARCSX-12	240 VAC, 50/60Hz	15,700 Ω
	782XBXC-6D	W78RCSX-6	6 VDC	40 Ω
782XBXM4L-12D	782XBXC-12D	W78RCSX-7	12 VDC	160 Ω
782XBXM4L-24D	782XBXC-24D	W78RCSX-8	24 VDC	650 Ω
	782XBXC-48D	W78RCSX-9	48 VDC	2600 Ω
782XBXM4L-110D	782XBXC-110D	W78RCSX-10	110/125 VDC	11,000 Ω
PRINTED CIRCUIT, 15 AMP				
	782XBXCT-24A	W78ARPCX-3	24 VAC, 50/60Hz	180 Ω
	782XBXCT-120A	W78ARPCX-6	110/120 VAC, 50/60Hz	4,430 Ω
	782XBXCT-6D	W78RPCX-1	6 VDC	40 Ω
	782XBXCT-12D	W78RPCX-2	12 VDC	160 Ω
	782XBXCT-24D	W78RPCX-3	24 VDC	650 Ω

NOTE: CLASS 782C IS AN ENHANCED VERSION OF THE 78, IT HAS SUPERIOR RATINGS, A FLAG INDICATOR, & DISPLAYS BOTH PART NUMBERS.

PHONE: (843) 393-5778 FAX: (843) 393-4123 EMAIL: info@magnecraft.com

782 - 2 & 4 POLE "ICE CUBE" CONTROL RELAY

DPDT & 4PDT, 1, 3, 5 & 10 AMPS



Mating Sockets
70-461-1, SCREW/DIN
70-378-1: SOLDER
70-379-1: PRINTED CIRCUIT
See section 7

STANDARD PART NUMBERS					COIL MEASURED @ 25 °C	
FULL FEATURED	PLAIN COVER WITH FLAG		HERMETICALLY SEALED	FULL FEATURED	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
4PDT				DPDT		
SOLDER/PLUG -IN, BIFURCATED CONTACTS 3 AMP						
	DUAL MARKED					
	NEW PART NUMBER	SUPERCEDES				
	782XDX3C-12A	W78ATCSX-2			12 VAC, 50/60 Hz	46 Ω
782XDX3M4L-24A	782XDX3C-24A	W78ATCSX-3		782XBX3M4L-24A	24 VAC, 50/60 Hz	180 Ω
782XDX3M4L-120A	782XDX3C-120A	W78ATCSX-5		782XBX3M4L-120A	110/120 VAC, 50/60 Hz	4,430 Ω
782XDX3M4L-220/230A	782XDX3C-220/230A			782XBX3M4L-220/230A	220/230 VAC, 50/60 Hz	15,000 Ω
782XDX3M4L-240A	782XDX3C-240A	W78ATCSX-6		782XBX3M4L-240A	240 VAC, 50/60 Hz	15,700 Ω
	782XDX3C-6D	W78TCSX-1			6 VDC	
782XDX3M4L-12D	782XDX3C-12D	W78TCSX-2		782XBX3M4L-12D	12 VDC	160 Ω
782XDX3M4L-24D	782XDX3C-24D	W78TCSX-3		782XBX3M4L-24D	24 VDC	650 Ω
782XDX3M4L-110D	782XDX3C-110D	W78TCSX-5		782XBX3M4L-110D	110/125 VDC	11,000 Ω
SOLDER/PLUG -IN, CONTACTS 3 AMP						
	782XDX1C-12A	W78ACSX-2			12 VAC, 50/60 Hz	46 Ω
782XDX1M4L-24A	782XDX1C-24A	W78ACSX-3	782XDXH10-24A		24 VAC, 50/60 Hz	180 Ω
782XDX1M4L-120A	782XDX1C-120A	W78ACSX-5	782XDXH10-120A		110/120 VAC, 50/60 Hz	4,430 Ω
782XDX1M4L-220/230A	782XDX1C-220/230A				220/230 VAC, 50/60 Hz	15,000 Ω
782XDX1M4L-240A	782XDX1C-240A	W78ACSX-6			240 VAC, 50/60 Hz	15,700 Ω
	782XDX1C-6D	W78CSX-1			6 VDC	
782XDX1M4L-12D	782XDX1C-12D	W78CSX-2	782XDXH10-12D		12 VDC	160 Ω
782XDX1M4L-24D	782XDX1C-24D	W78CSX-3	782XDXH10-24D		24 VDC	650 Ω
782XDX1M4L-110D	782XDX1C-110D	W78CSX-6	782XDXH10-110D		110/125 VDC	11,000 Ω
SOLDER/PLUG -IN, CONTACTS 10 AMP						
782XDX2M4L-24A	782XDX2C-24A	W78KACSX-15		782XBX2M4L-24A	24 VAC, 50/60 Hz	180 Ω
782XDX2M4L-120A	782XDX2C-120A	W78KACSX-17	782XDXH21-120A	782XBX2M4L-120A	110/120 VAC, 50/60 Hz	4,430 Ω
782XDX2M4L-220/230A	782XDX2C-220/230A			782XBX2M4L-220/230A	220/230 VAC, 50/60 Hz	15,000 Ω
782XDX2M4L-240A	782XDX2C-240A	W78KACSX-18		782XBX2M4L-240A	240 VAC, 50/60 Hz	15,700 Ω
782XDX2M4L-12D	782XDX2C-12D	W78KCSX-12	782XDXH21-12D	782XBX2M4L-12D	12 VDC	160 Ω
782XDX2M4L-24D	782XDX2C-24D	W78KCSX-13	782XDXH21-24D	782XBX2M4L-24D	24 VDC	650 Ω
782XDX2M4L-110D	782XDX2C-110D			782XBX2M4L-110D	110/125 VDC	11,000 Ω
PRINTED CIRCUIT BIFURCATED CONTACTS 3 AMP						
	782XDX3CT-24A	W78APCX-3			24 VAC, 50/60 Hz	180 Ω
	782XDX3CT-120A	W78APCX-5			110/120 VAC, 50/60 Hz	4430 Ω
	782XDX3CT-12D	W78PCX-2			12 VDC	15700 Ω
	782XDX3CT-24D	W78PCX-3			24 VDC	160 Ω
	782XDX3CT-110D	W78PCX-6			110/125 VDC	11,000 Ω

NOTE: CLASS 782C IS AN ENHANCED VERSION OF THE 78, IT HAS SUPERIOR RATINGS, A FLAG INDICATOR, & DISPLAYS BOTH PART NUMBERS.

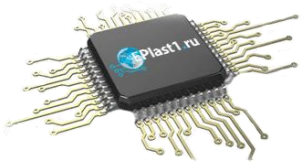
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.