

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

### Internal evaluation

#### Overview



3RG78 45 light curtains and arrays with integrated processing unit for type 4 in accordance with IEC/EN 61496

- With "Standard" function package
- Resolutions: 14, 30, 50, and 90 mm
- Protective zone height: 150 mm to 3000 mm
- 2-beam, 3-beam or 4-beam light arrays
- Cascading of host and guest devices for greater protective zone heights or lengths or for an angular arrangement (optional).

Two standard 3RG78 48-0AB mounting brackets each are enclosed with all devices (can also be ordered as accessories).

#### 3RG78 45 program overview

Unit type	Function package	Output	Connection type	For light curtains: Resolution For light arrays and transceivers: Range				see Page
				14 mm	30 mm	50 mm	90 mm	
Light curtains <small>NEW</small>	Standard	Transistor	M12 plug connector	✓	✓	✓	✓	3/36
Light arrays <small>NEW</small>	Standard	Transistor	M12 plug connector	0.8 m to 18 m; 6 to 60 m				3/38
Transceiver <small>NEW</small>	Standard	Transistor	M12 plug connector	6.5 m				3/38
Light curtains <small>NEW</small>	Standard	Transistor	Hirschmann	✓	✓	–	–	3/39
Light arrays <small>NEW</small>	Standard	Transistor	Hirschmann	0.8 m to 18 m; 6 to 60 m				3/40
Transceiver <small>NEW</small>	Standard	Transistor	Hirschmann	6.5 m				3/40
Light curtains <small>NEW</small>	Standard	Transistor	Brad Harrison (MIN) <sup>1)</sup>	✓	✓	✓	✓	3/41
Light arrays <small>NEW</small>	Standard	Transistor	Brad Harrison (MIN) <sup>1)</sup>	0.8 m to 18 m; 6 to 60 m				3/43
Transceiver <small>NEW</small>	Standard	Transistor	Brad Harrison (MIN) <sup>1)</sup>	6.5 m				3/43
Light curtains <small>NEW</small>	Standard	Transistor	Cable gland	✓	✓	✓	✓	3/44
Light arrays <small>NEW</small>	Standard	Transistor	Cable gland	0.8 m to 18 m; 6 to 60 m				3/46
Transceiver <small>NEW</small>	Standard	Transistor	Cable gland	6.5 m				3/46

#### Accessories

Electrical connection	
• Hirschmann type cables and cable plugs	3/85
• Brad-Harrison type cable (MIN series)	3/85
• Connecting cable with M12 connection	3/86
Assembly materials	
• Fixing columns, reflecting mirror	3/83
• Muting mounting systems	3/84
• Muting accessories	3/86
Laser alignment aids, diagnostic software	3/84

1) Required primarily for applications in the NAFTA market

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### Technical specifications

Type	3RG78 45
Safety category to EN, IEC 61496-1, -3	Type 4 (self-monitoring)
Detection capability (resolution)	14 mm, 30 mm, 50 mm, 90 mm or whole person with 2, 3 or 4 beams
Protective field height	
• for 14 and 30 mm resolution	150 ... 1800 mm
• for 50 mm resolution	450 ... 3000 mm
• for 90 mm resolution	750 ... 3000 mm
Protective field width, sensing field	
• for 14 mm resolution	0.3 ... 6 m
• for 30, 50 and 90 mm resolution	0.8 ... 18 m
• for 18 m light array	0.8 ... 18 m
• for 60 m light array	6 ... 60 m
Supply voltage (emitter and receiver)	24 V DC $\pm$ 20% (external power pack with safe isolation and 20 ms voltage power loss ride-through)
Current consumption	
• Emitter	75 mA
• Receiver	180 mA (without external load)
Vibration resistance	5 g, 10 ... 55 Hz to IEC/EN 60068-2-6
Shock resistance	10 g, 16 ms to IEC/EN 60068-2-29
Infrared stray light suppression	2 procedures may be selected
• Standard	High suppression
• d-scan	Very high suppression (response time increases in units with more than 15 beams)
Synchronization between emitter and receiver	Optical; 2 transmission channels can be selected
Ambient temperature	
• Operation	0 ... +55 °C
• Storage	-25 ... +70 °C
Humidity	15 ... 95%
Type of protection	IP65
Electrical connection	via Pg 13 screw-type terminals and pluggable wiring space
Connecting cable	
• Emitter	7-pin: 0.5 ... 1.0 mm <sup>2</sup>
• Receiver	7-pin: 0.5 ... 1.0 mm <sup>2</sup> (shielded, if necessary)
Cable length for 1.0 mm <sup>2</sup>	100 m

### Inputs

Emitter test input	Closed-circuit principle
Minimum opening duration	50 ms

### Outputs

Safety outputs	2 failsafe pnp outputs with cross-circuit monitoring (short circuit proof)
Output voltage $U_{a \min}$	$U_{\text{vers}} - 2.7 \text{ V}$
Output current $I_{a \max}$	0.3 A
Peak current	0.4 A
Continuous current	
• at 35 °C	0.3 A
• at 55 °C	0.22 A
Max. load capacity per output	300 nF (100 nF at channel 2)
Response time from the protective field interrupt to disconnection of the safety outputs	Increases with higher number of beams
• for 14 mm resolution	7 ... 39 ms (d-scan 10 ... 78 ms)
• for 30 mm resolution	7 ... 20 ms (d-scan 10 ... 39 ms)
• for 50 mm resolution	17 ms (d-scan 33 ms)
• for 90 mm resolution	13 ms (d-scan 20 ms)
• for 2, 3, or 4-beam light arrays	5 ms (d-scan 8 ms)
Reactivation time from release of the protective field to connection of the safety outputs	
• For all resolutions	0.5 ms
• After very brief protective field interrupts	100 ms
Pollution and error message output	pnp output, short circuit proof
Output current, max.	70 mA
Safety and diagnostic interfaces	RS485, 57.6 kBaud

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#### Selection and Ordering Data

Light curtains with standard function package  
transistor output with M12 plug connector <sup>NEW</sup>

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
<b>14 mm resolution</b>				
150	Receiver	A 3RG78 45-3BB01	–	3RG78 42-6BB21
150	Emitter	A 3RG78 45-3BB00	–	3RG78 42-6BB20
225	Receiver	A 3RG78 45-3BC01	A 3RG78 45-3BC11	3RG78 42-6BC21
225	Emitter	A 3RG78 45-3BC00	A 3RG78 45-3BC10	3RG78 42-6BC20
300	Receiver	A 3RG78 45-3BD01	A 3RG78 45-3BD11	3RG78 42-6BD21
300	Emitter	A 3RG78 45-3BD00	A 3RG78 45-3BD10	3RG78 42-6BD20
450	Receiver	A 3RG78 45-3BE01	A 3RG78 45-3BE11	3RG78 42-6BE21
450	Emitter	A 3RG78 45-3BE00	A 3RG78 45-3BE10	3RG78 42-6BE20
600	Receiver	A 3RG78 45-3BF01	A 3RG78 45-3BF11	3RG78 42-6BF21
600	Emitter	A 3RG78 45-3BF00	A 3RG78 45-3BF10	3RG78 42-6BF20
750	Receiver	A 3RG78 45-3BG01	A 3RG78 45-3BG11	3RG78 42-6BG21
750	Emitter	A 3RG78 45-3BG00	A 3RG78 45-3BG10	3RG78 42-6BG20
900	Receiver	A 3RG78 45-3BH01	A 3RG78 45-3BH11	3RG78 42-6BH21
900	Emitter	A 3RG78 45-3BH00	A 3RG78 45-3BH10	3RG78 42-6BH20
1050	Receiver	A 3RG78 45-3BJ01	A 3RG78 45-3BJ11	3RG78 42-6BJ21
1050	Emitter	A 3RG78 45-3BJ00	A 3RG78 45-3BJ10	3RG78 42-6BJ20
1200	Receiver	A 3RG78 45-3BK01	A 3RG78 45-3BK11	3RG78 42-6BK21
1200	Emitter	A 3RG78 45-3BK00	A 3RG78 45-3BK10	3RG78 42-6BK20
1350	Receiver	A 3RG78 45-3BL01	A 3RG78 45-3BL11	3RG78 42-6BL21
1350	Emitter	A 3RG78 45-3BL00	A 3RG78 45-3BL10	3RG78 42-6BL20
1500	Receiver	A 3RG78 45-3BM01	A 3RG78 45-3BM11	3RG78 42-6BM21
1500	Emitter	A 3RG78 45-3BM00	A 3RG78 45-3BM10	3RG78 42-6BM20
1650	Receiver	A 3RG78 45-3BN01	A 3RG78 45-3BN11	3RG78 42-6BN21
1650	Emitter	A 3RG78 45-3BN00	A 3RG78 45-3BN10	3RG78 42-6BN20
1800	Receiver	A 3RG78 45-3BP01	A 3RG78 45-3BP11	3RG78 42-6BP21
1800	Emitter	A 3RG78 45-3BP00	A 3RG78 45-3BP10	3RG78 42-6BP20
<b>30 mm resolution</b>				
150	Receiver	A 3RG78 45-3DB01	–	3RG78 42-6DB21
150	Emitter	A 3RG78 45-3DB00	–	3RG78 42-6DB20
225	Receiver	A 3RG78 45-3DC01	A 3RG78 45-3DC11	3RG78 42-6DC21
225	Emitter	A 3RG78 45-3DC00	A 3RG78 45-3DC10	3RG78 42-6DC20
300	Receiver	A 3RG78 45-3DD01	A 3RG78 45-3DD11	3RG78 42-6DD21
300	Emitter	A 3RG78 45-3DD00	A 3RG78 45-3DD10	3RG78 42-6DD20
450	Receiver	A 3RG78 45-3DE01	A 3RG78 45-3DE11	3RG78 42-6DE21
450	Emitter	A 3RG78 45-3DE00	A 3RG78 45-3DE10	3RG78 42-6DE20
600	Receiver	A 3RG78 45-3DF01	A 3RG78 45-3DF11	3RG78 42-6DF21
600	Emitter	A 3RG78 45-3DF00	A 3RG78 45-3DF10	3RG78 42-6DF20
750	Receiver	A 3RG78 45-3DG01	A 3RG78 45-3DG11	3RG78 42-6DG21
750	Emitter	A 3RG78 45-3DG00	A 3RG78 45-3DG10	3RG78 42-6DG20
900	Receiver	A 3RG78 45-3DH01	A 3RG78 45-3DH11	3RG78 42-6DH21
900	Emitter	A 3RG78 45-3DH00	A 3RG78 45-3DH10	3RG78 42-6DH20
1050	Receiver	A 3RG78 45-3DJ01	A 3RG78 45-3DJ11	3RG78 42-6DJ21
1050	Emitter	A 3RG78 45-3DJ00	A 3RG78 45-3DJ10	3RG78 42-6DJ20
1200	Receiver	A 3RG78 45-3DK01	A 3RG78 45-3DK11	3RG78 42-6DK21
1200	Emitter	A 3RG78 45-3DK00	A 3RG78 45-3DK10	3RG78 42-6DK20

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Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
1350	Receiver	A 3RG78 45-3DL01	A 3RG78 45-3DL11	3RG78 42-6DL21
1350	Emitter	3RG78 45-3DL00	A 3RG78 45-3DL10	3RG78 42-6DL20
1500	Receiver	A 3RG78 45-3DM01	A 3RG78 45-3DM11	3RG78 42-6DM21
1500	Emitter	A 3RG78 45-3DM00	A 3RG78 45-3DM10	3RG78 42-6DM20
1650	Receiver	A 3RG78 45-3DN01	A 3RG78 45-3DN11	3RG78 42-6DN21
1650	Emitter	A 3RG78 45-3DN00	A 3RG78 45-3DN10	3RG78 42-6DN20
1800	Receiver	A 3RG78 45-3DP01	A 3RG78 45-3DP11	3RG78 42-6DP21
1800	Emitter	A 3RG78 45-3DP00	A 3RG78 45-3DP10	3RG78 42-6DP20
<b>50 mm resolution</b>				
450	Receiver	A 3RG78 45-3EE01	A 3RG78 45-3EE11	3RG78 42-6EE21
450	Emitter	A 3RG78 45-3EE00	A 3RG78 45-3EE10	3RG78 42-6EE20
600	Receiver	A 3RG78 45-3EF01	A 3RG78 45-3EF11	3RG78 42-6EF21
600	Emitter	A 3RG78 45-3EF00	A 3RG78 45-3EF10	3RG78 42-6EF20
750	Receiver	A 3RG78 45-3EG01	A 3RG78 45-3EG11	3RG78 42-6EG21
750	Emitter	A 3RG78 45-3EG00	A 3RG78 45-3EG10	3RG78 42-6EG20
900	Receiver	A 3RG78 45-3EH01	A 3RG78 45-3EH11	3RG78 42-6EH21
900	Emitter	A 3RG78 45-3EH00	A 3RG78 45-3EH10	3RG78 42-6EH20
1050	Receiver	A 3RG78 45-3EJ01	A 3RG78 45-3EJ11	3RG78 42-6EJ21
1050	Emitter	A 3RG78 45-3EJ00	A 3RG78 45-3EJ10	3RG78 42-6EJ20
1200	Receiver	A 3RG78 45-3EK01	A 3RG78 45-3EK11	3RG78 42-6EK21
1200	Emitter	A 3RG78 45-3EK00	A 3RG78 45-3EK10	3RG78 42-6EK20
1350	Receiver	A 3RG78 45-3EL01	A 3RG78 45-3EL11	3RG78 42-6EL21
1350	Emitter	A 3RG78 45-3EL00	A 3RG78 45-3EL10	3RG78 42-6EL20
1500	Receiver	A 3RG78 45-3EM01	A 3RG78 45-3EM11	3RG78 42-6EM21
1500	Emitter	A 3RG78 45-3EM00	A 3RG78 45-3EM10	3RG78 42-6EM20
1650	Receiver	A 3RG78 45-3EN01	A 3RG78 45-3EN11	3RG78 42-6EN21
1650	Emitter	A 3RG78 45-3EN00	A 3RG78 45-3EN10	3RG78 42-6EN20
1800	Receiver	A 3RG78 45-3EP01	A 3RG78 45-3EP11	3RG78 42-6EP21
1800	Emitter	A 3RG78 45-3EP00	A 3RG78 45-3EP10	3RG78 42-6EP20
2100	Receiver	A 3RG78 45-3ER01	A 3RG78 45-3ER11	3RG78 42-6ER21
2100	Emitter	A 3RG78 45-3ER00	A 3RG78 45-3ER10	3RG78 42-6ER20
2400	Receiver	A 3RG78 45-3ES01	A 3RG78 45-3ES11	3RG78 42-6ES21
2400	Emitter	A 3RG78 45-3ES00	A 3RG78 45-3ES10	3RG78 42-6ES20
2700	Receiver	A 3RG78 45-3ET01	A 3RG78 45-3ET11	3RG78 42-6ET21
2700	Emitter	A 3RG78 45-3ET00	A 3RG78 45-3ET10	3RG78 42-6ET20
3000	Receiver	A 3RG78 45-3EU01	A 3RG78 45-3EU11	3RG78 42-6EU21
3000	Emitter	A 3RG78 45-3EU00	A 3RG78 45-3EU10	3RG78 42-6EU20
<b>90 mm resolution</b>				
750	Receiver	A 3RG78 45-3JG01	A 3RG78 45-3JG11	3RG78 42-6JG21
750	Emitter	A 3RG78 45-3JG00	A 3RG78 45-3JG10	3RG78 42-6JG20
900	Receiver	A 3RG78 45-3JH01	A 3RG78 45-3JH11	3RG78 42-6JH21
900	Emitter	A 3RG78 45-3JH00	A 3RG78 45-3JH10	3RG78 42-6JH20
1050	Receiver	A 3RG78 45-3JJ01	A 3RG78 45-3JJ11	3RG78 42-6JJ21
1050	Emitter	A 3RG78 45-3JJ00	A 3RG78 45-3JJ10	3RG78 42-6JJ20
1200	Receiver	A 3RG78 45-3JK01	A 3RG78 45-3JK11	3RG78 42-6JK21
1200	Emitter	A 3RG78 45-3JK00	A 3RG78 45-3JK10	3RG78 42-6JK20
1350	Receiver	A 3RG78 45-3JL01	A 3RG78 45-3JL11	3RG78 42-6JL21
1350	Emitter	A 3RG78 45-3JL00	A 3RG78 45-3JL10	3RG78 42-6JL20
1500	Receiver	A 3RG78 45-3JM01	A 3RG78 45-3JM11	3RG78 42-6JM21
1500	Emitter	A 3RG78 45-3JM00	A 3RG78 45-3JM10	3RG78 42-6JM20

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### Internal evaluation

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
1650	Receiver	A <b>3RG78 45-3JN01</b>	A <b>3RG78 45-3JN11</b>	<b>3RG78 42-6JN21</b>
1650	Emitter	A <b>3RG78 45-3JN00</b>	A <b>3RG78 45-3JN10</b>	<b>3RG78 42-6JN20</b>
1800	Receiver	A <b>3RG78 45-3JP01</b>	A <b>3RG78 45-3JP11</b>	<b>3RG78 42-6JP21</b>
1800	Emitter	A <b>3RG78 45-3JP00</b>	A <b>3RG78 45-3JP10</b>	<b>3RG78 42-6JP20</b>
2100	Receiver	A <b>3RG78 45-3JR01</b>	A <b>3RG78 45-3JR11</b>	<b>3RG78 42-6JR21</b>
2100	Emitter	A <b>3RG78 45-3JR00</b>	A <b>3RG78 45-3JR10</b>	<b>3RG78 42-6JR20</b>
2400	Receiver	A <b>3RG78 45-3JS01</b>	A <b>3RG78 45-3JS11</b>	<b>3RG78 42-6JS21</b>
2400	Emitter	A <b>3RG78 45-3JS00</b>	A <b>3RG78 45-3JS10</b>	<b>3RG78 42-6JS20</b>
2700	Receiver	A <b>3RG78 45-3JT01</b>	A <b>3RG78 45-3JT11</b>	<b>3RG78 42-6JT21</b>
2700	Emitter	A <b>3RG78 45-3JT00</b>	A <b>3RG78 45-3JT10</b>	<b>3RG78 42-6JT20</b>
3000	Receiver	A <b>3RG78 45-3JU01</b>	A <b>3RG78 45-3JU11</b>	<b>3RG78 42-6JU21</b>
3000	Emitter	A <b>3RG78 45-3JU00</b>	A <b>3RG78 45-3JU10</b>	<b>3RG78 42-6JU20</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Light arrays with standard function package transistor output with M12 plug connector <sup>NEW</sup>

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>0.8 – 18 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-3MH01</b>
4-beam	300	Emitter	A <b>3RG78 45-3MH00</b>
3-beam	400	Receiver	A <b>3RG78 45-3PG01</b>
3-beam	400	Emitter	A <b>3RG78 45-3PG00</b>
2-beam	500	Receiver	A <b>3RG78 45-3SE01</b>
2-beam	500	Emitter	A <b>3RG78 45-3SE00</b>
<b>6 – 60 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-3MH51</b>
4-beam	300	Emitter	A <b>3RG78 45-3MH50</b>
3-beam	400	Receiver	A <b>3RG78 45-3PG51</b>
3-beam	400	Emitter	A <b>3RG78 45-3PG50</b>
2-beam	500	Receiver	A <b>3RG78 45-3SE51</b>
2-beam	500	Emitter	A <b>3RG78 45-3SE50</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Transceiver with standard function package transistor output with M12 plug connector <sup>NEW</sup>

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>6.5 m range</b>			
2-beam	500	Transceiver	A <b>3RG78 45-3TE01</b>
Reflective mirror for transceiver			<b>3RG78 48-1TL</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

Internal evaluation

Light curtains with standard function package  
transistor output with Hirschmann plug connector 

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
<b>14 mm resolution</b>				
150	Receiver	A <b>3RG78 45-2BB01</b>	–	<b>3RG78 42-6BB21</b>
150	Emitter	A <b>3RG78 45-2BB00</b>	–	<b>3RG78 42-6BB20</b>
225	Receiver	A <b>3RG78 45-2BC01</b>	On request	<b>3RG78 42-6BC21</b>
225	Emitter	A <b>3RG78 45-2BC00</b>	On request	<b>3RG78 42-6BC20</b>
300	Receiver	A <b>3RG78 45-2BD01</b>	On request	<b>3RG78 42-6BD21</b>
300	Emitter	A <b>3RG78 45-2BD00</b>	On request	<b>3RG78 42-6BD20</b>
450	Receiver	A <b>3RG78 45-2BE01</b>	On request	<b>3RG78 42-6BE21</b>
450	Emitter	A <b>3RG78 45-2BE00</b>	On request	<b>3RG78 42-6BE20</b>
600	Receiver	A <b>3RG78 45-2BF01</b>	On request	<b>3RG78 42-6BF21</b>
600	Emitter	A <b>3RG78 45-2BF00</b>	On request	<b>3RG78 42-6BF20</b>
750	Receiver	A <b>3RG78 45-2BG01</b>	On request	<b>3RG78 42-6BG21</b>
750	Emitter	A <b>3RG78 45-2BG00</b>	On request	<b>3RG78 42-6BG20</b>
900	Receiver	A <b>3RG78 45-2BH01</b>	On request	<b>3RG78 42-6BH21</b>
900	Emitter	A <b>3RG78 45-2BH00</b>	On request	<b>3RG78 42-6BH20</b>
1050	Receiver	A <b>3RG78 45-2BJ01</b>	On request	<b>3RG78 42-6BJ21</b>
1050	Emitter	A <b>3RG78 45-2BJ00</b>	On request	<b>3RG78 42-6BJ20</b>
1200	Receiver	A <b>3RG78 45-2BK01</b>	On request	<b>3RG78 42-6BK21</b>
1200	Emitter	A <b>3RG78 45-2BK00</b>	On request	<b>3RG78 42-6BK20</b>
1350	Receiver	A <b>3RG78 45-2BL01</b>	On request	<b>3RG78 42-6BL21</b>
1350	Emitter	A <b>3RG78 45-2BL00</b>	On request	<b>3RG78 42-6BL20</b>
1500	Receiver	A <b>3RG78 45-2BM01</b>	On request	<b>3RG78 42-6BM21</b>
1500	Emitter	A <b>3RG78 45-2BM00</b>	On request	<b>3RG78 42-6BM20</b>
1650	Receiver	A <b>3RG78 45-2BN01</b>	On request	<b>3RG78 42-6BN21</b>
1650	Emitter	A <b>3RG78 45-2BN00</b>	On request	<b>3RG78 42-6BN20</b>
1800	Receiver	A <b>3RG78 45-2BP01</b>	On request	<b>3RG78 42-6BP21</b>
1800	Emitter	A <b>3RG78 45-2BP00</b>	On request	<b>3RG78 42-6BP20</b>
<b>30 mm resolution</b>				
150	Receiver	A <b>3RG78 45-2DB01</b>	–	<b>3RG78 42-6DB21</b>
150	Emitter	A <b>3RG78 45-2DB00</b>	–	<b>3RG78 42-6DB20</b>
225	Receiver	A <b>3RG78 45-2DC01</b>	On request	<b>3RG78 42-6DC21</b>
225	Emitter	A <b>3RG78 45-2DC00</b>	On request	<b>3RG78 42-6DC20</b>
300	Receiver	A <b>3RG78 45-2DD01</b>	On request	<b>3RG78 42-6DD21</b>
300	Emitter	A <b>3RG78 45-2DD00</b>	On request	<b>3RG78 42-6DD20</b>
450	Receiver	A <b>3RG78 45-2DE01</b>	On request	<b>3RG78 42-6DE21</b>
450	Emitter	A <b>3RG78 45-2DE00</b>	On request	<b>3RG78 42-6DE20</b>
600	Receiver	A <b>3RG78 45-2DF01</b>	On request	<b>3RG78 42-6DF21</b>
600	Emitter	A <b>3RG78 45-2DF00</b>	On request	<b>3RG78 42-6DF20</b>
750	Receiver	A <b>3RG78 45-2DG01</b>	On request	<b>3RG78 42-6DG21</b>
750	Emitter	A <b>3RG78 45-2DG00</b>	On request	<b>3RG78 42-6DG20</b>
900	Receiver	A <b>3RG78 45-2DH01</b>	On request	<b>3RG78 42-6DH21</b>
900	Emitter	A <b>3RG78 45-2DH00</b>	On request	<b>3RG78 42-6DH20</b>
1050	Receiver	A <b>3RG78 45-2DJ01</b>	On request	<b>3RG78 42-6DJ21</b>
1050	Emitter	A <b>3RG78 45-2DJ00</b>	On request	<b>3RG78 42-6DJ20</b>
1200	Receiver	A <b>3RG78 45-2DK01</b>	On request	<b>3RG78 42-6DK21</b>
1200	Emitter	A <b>3RG78 45-2DK00</b>	On request	<b>3RG78 42-6DK20</b>
1350	Receiver	A <b>3RG78 45-2DL01</b>	On request	<b>3RG78 42-6DL21</b>
1350	Emitter	A <b>3RG78 45-2DL00</b>	On request	<b>3RG78 42-6DL20</b>

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

### Internal evaluation

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
1500	Receiver	A <b>3RG78 45-2DM01</b>	<b>On request</b>	<b>3RG78 42-6DM21</b>
1500	Emitter	A <b>3RG78 45-2DM00</b>	<b>On request</b>	<b>3RG78 42-6DM20</b>
1650	Receiver	A <b>3RG78 45-2DN01</b>	<b>On request</b>	<b>On request</b>
1650	Emitter	A <b>3RG78 45-2DN00</b>	<b>On request</b>	<b>On request</b>
1800	Receiver	A <b>3RG78 45-2DP01</b>	<b>On request</b>	<b>On request</b>
1800	Emitter	A <b>3RG78 45-2DP00</b>	<b>On request</b>	<b>On request</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Light arrays with standard function package transistor output with Hirschmann plug connector

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>0.8 – 18 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-2MH01</b>
4-beam	300	Emitter	A <b>3RG78 45-2MH00</b>
3-beam	400	Receiver	A <b>3RG78 45-2PG01</b>
3-beam	400	Emitter	A <b>3RG78 45-2PG00</b>
2-beam	500	Receiver	A <b>3RG78 45-2SE01</b>
2-beam	500	Emitter	A <b>3RG78 45-2SE00</b>
<b>6 – 60 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-2MH51</b>
4-beam	300	Emitter	A <b>3RG78 45-2MH50</b>
3-beam	400	Receiver	A <b>3RG78 45-2PG51</b>
3-beam	400	Emitter	A <b>3RG78 45-2PG50</b>
2-beam	500	Receiver	A <b>3RG78 45-2SE51</b>
2-beam	500	Emitter	A <b>3RG78 45-2SE50</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Transceiver with Standard function package transistor output with Hirschmann plug connector

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>6.5 m range</b>			
2-beam	500	Transceiver	A <b>3RG78 45-2TE01</b>
Reflective mirror for transceiver			<b>3RG78 48-1TL</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

Internal evaluation

Light curtains with standard function package  
transistor output with Brad Harrison connection (MIN-Series) <sup>1)</sup> 

Protection height Version		Standard device		Host device		Guest device	
mm		Order No.		Order No.		Order No.	
<b>14 mm resolution</b>							
150	Receiver	A	<b>3RG78 45-4BB01</b>	A	–	<b>3RG78 42-6BB21</b>	
150	Emitter	A	<b>3RG78 45-4BB00</b>	A	–	<b>3RG78 42-6BB20</b>	
225	Receiver	A	<b>3RG78 45-4BC01</b>	A	<b>3RG78 45-4BC11</b>	<b>3RG78 42-6BC21</b>	
225	Emitter	A	<b>3RG78 45-4BC00</b>	A	<b>3RG78 45-4BC10</b>	<b>3RG78 42-6BC20</b>	
300	Receiver	A	<b>3RG78 45-4BD01</b>	A	<b>3RG78 45-4BD11</b>	<b>3RG78 42-6BD21</b>	
300	Emitter	A	<b>3RG78 45-4BD00</b>	A	<b>3RG78 45-4BD10</b>	<b>3RG78 42-6BD20</b>	
450	Receiver	A	<b>3RG78 45-4BE01</b>	A	<b>3RG78 45-4BE11</b>	<b>3RG78 42-6BE21</b>	
450	Emitter	A	<b>3RG78 45-4BE00</b>	A	<b>3RG78 45-4BE10</b>	<b>3RG78 42-6BE20</b>	
600	Receiver	A	<b>3RG78 45-4BF01</b>	A	<b>3RG78 45-4BF11</b>	<b>3RG78 42-6BF21</b>	
600	Emitter	A	<b>3RG78 45-4BF00</b>	A	<b>3RG78 45-4BF10</b>	<b>3RG78 42-6BF20</b>	
750	Receiver	A	<b>3RG78 45-4BG01</b>	A	<b>3RG78 45-4BG11</b>	<b>3RG78 42-6BG21</b>	
750	Emitter	A	<b>3RG78 45-4BG00</b>	A	<b>3RG78 45-4BG10</b>	<b>3RG78 42-6BG20</b>	
900	Receiver	A	<b>3RG78 45-4BH01</b>	A	<b>3RG78 45-4BH11</b>	<b>3RG78 42-6BH21</b>	
900	Emitter	A	<b>3RG78 45-4BH00</b>	A	<b>3RG78 45-4BH10</b>	<b>3RG78 42-6BH20</b>	
1050	Receiver	A	<b>3RG78 45-4BJ01</b>	A	<b>3RG78 45-4BJ11</b>	<b>3RG78 42-6BJ21</b>	
1050	Emitter	A	<b>3RG78 45-4BJ00</b>	A	<b>3RG78 45-4BJ10</b>	<b>3RG78 42-6BJ20</b>	
1200	Receiver	A	<b>3RG78 45-4BK01</b>	A	<b>3RG78 45-4BK11</b>	<b>3RG78 42-6BK21</b>	
1200	Emitter	A	<b>3RG78 45-4BK00</b>	A	<b>3RG78 45-4BK10</b>	<b>3RG78 42-6BK20</b>	
1350	Receiver	A	<b>3RG78 45-4BL01</b>	A	<b>3RG78 45-4BL11</b>	<b>3RG78 42-6BL21</b>	
1350	Emitter	A	<b>3RG78 45-4BL00</b>	A	<b>3RG78 45-4BL10</b>	<b>3RG78 42-6BL20</b>	
1500	Receiver	A	<b>3RG78 45-4BM01</b>	A	<b>3RG78 45-4BM11</b>	<b>3RG78 42-6BM21</b>	
1500	Emitter	A	<b>3RG78 45-4BM00</b>	A	<b>3RG78 45-4BM10</b>	<b>3RG78 42-6BM20</b>	
1650	Receiver	A	<b>3RG78 45-4BN01</b>	A	<b>3RG78 45-4BN11</b>	<b>3RG78 42-6BN21</b>	
1650	Emitter	A	<b>3RG78 45-4BN00</b>	A	<b>3RG78 45-4BN10</b>	<b>3RG78 42-6BN20</b>	
1800	Receiver	A	<b>3RG78 45-4BP01</b>	A	<b>3RG78 45-4BP11</b>	<b>3RG78 42-6BP21</b>	
1800	Emitter	A	<b>3RG78 45-4BP00</b>	A	<b>3RG78 45-4BP10</b>	<b>3RG78 42-6BP20</b>	
<b>30 mm resolution</b>							
150	Receiver	A	<b>3RG78 45-4DB01</b>	A	–	<b>3RG78 42-6DB21</b>	
150	Emitter	A	<b>3RG78 45-4DB00</b>	A	–	<b>3RG78 42-6DB20</b>	
225	Receiver	A	<b>3RG78 45-4DC01</b>	A	<b>3RG78 45-4DC11</b>	<b>3RG78 42-6DC21</b>	
225	Emitter	A	<b>3RG78 45-4DC00</b>	A	<b>3RG78 45-4DC10</b>	<b>3RG78 42-6DC20</b>	
300	Receiver	A	<b>3RG78 45-4DD01</b>	A	<b>3RG78 45-4DD11</b>	<b>3RG78 42-6DD21</b>	
300	Emitter	A	<b>3RG78 45-4DD00</b>	A	<b>3RG78 45-4DD10</b>	<b>3RG78 42-6DD20</b>	
450	Receiver	A	<b>3RG78 45-4DE01</b>	A	<b>3RG78 45-4DE11</b>	<b>3RG78 42-6DE21</b>	
450	Emitter	A	<b>3RG78 45-4DE00</b>	A	<b>3RG78 45-4DE10</b>	<b>3RG78 42-6DE20</b>	
600	Receiver	A	<b>3RG78 45-4DF01</b>	A	<b>3RG78 45-4DF11</b>	<b>3RG78 42-6DF21</b>	
600	Emitter	A	<b>3RG78 45-4DF00</b>	A	<b>3RG78 45-4DF10</b>	<b>3RG78 42-6DF20</b>	
750	Receiver	A	<b>3RG78 45-4DG01</b>	A	<b>3RG78 45-4DG11</b>	<b>3RG78 42-6DG21</b>	
750	Emitter	A	<b>3RG78 45-4DG00</b>	A	<b>3RG78 45-4DG10</b>	<b>3RG78 42-6DG20</b>	
900	Receiver	A	<b>3RG78 45-4DH01</b>	A	<b>3RG78 45-4DH11</b>	<b>3RG78 42-6DH21</b>	
900	Emitter	A	<b>3RG78 45-4DH00</b>	A	<b>3RG78 45-4DH10</b>	<b>3RG78 42-6DH20</b>	
1050	Receiver	A	<b>3RG78 45-4DJ01</b>	A	<b>3RG78 45-4DJ11</b>	<b>3RG78 42-6DJ21</b>	
1050	Emitter	A	<b>3RG78 45-4DJ00</b>	A	<b>3RG78 45-4DJ10</b>	<b>3RG78 42-6DJ20</b>	
1200	Receiver	A	<b>3RG78 45-4DK01</b>	A	<b>3RG78 45-4DK11</b>	<b>3RG78 42-6DK21</b>	
1200	Emitter	A	<b>3RG78 45-4DK00</b>	A	<b>3RG78 45-4DK10</b>	<b>3RG78 42-6DK20</b>	
1350	Receiver	A	<b>3RG78 45-4DL01</b>	A	<b>3RG78 45-4DL11</b>	<b>3RG78 42-6DL21</b>	
1350	Emitter	A	<b>3RG78 45-4DL00</b>	A	<b>3RG78 45-4DL10</b>	<b>3RG78 42-6DL20</b>	

1) Required primarily for applications in the NAFTA market



# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

### Internal evaluation

Protection height Version		Standard device		Host device		Guest device	
mm		Order No.		Order No.		Order No.	
1500	Receiver	A	3RG78 45-4DM01	A	3RG78 45-4DM11		3RG78 42-6DM21
1500	Emitter	A	3RG78 45-4DM00	A	3RG78 45-4DM10		3RG78 42-6DM20
1650	Receiver	A	3RG78 45-4DN01	A	3RG78 45-4DN11		3RG78 42-6DN21
1650	Emitter	A	3RG78 45-4DN00	A	3RG78 45-4DN10		3RG78 42-6DN20
1800	Receiver	A	3RG78 45-4DP01	A	3RG78 45-4DP11		3RG78 42-6DP21
1800	Emitter	A	3RG78 45-4DP00	A	3RG78 45-4DP10		3RG78 42-6DP20
<b>50 mm resolution</b>							
450	Receiver	A	3RG78 45-4EE01	A	3RG78 45-4EE11		3RG78 42-6EE21
450	Emitter	A	3RG78 45-4EE00	A	3RG78 45-4EE10		3RG78 42-6EE20
600	Receiver	A	3RG78 45-4EF01	A	3RG78 45-4EF11		3RG78 42-6EF21
600	Emitter	A	3RG78 45-4EF00	A	3RG78 45-4EF10		3RG78 42-6EF20
750	Receiver	A	3RG78 45-4EG01	A	3RG78 45-4EG11		3RG78 42-6EG21
750	Emitter	A	3RG78 45-4EG00	A	3RG78 45-4EG10		3RG78 42-6EG20
900	Receiver	A	3RG78 45-4EH01	A	3RG78 45-4EH11		3RG78 42-6EH21
900	Emitter	A	3RG78 45-4EH00	A	3RG78 45-4EH10		3RG78 42-6EH20
1050	Receiver	A	3RG78 45-4EJ01	A	3RG78 45-4EJ11		3RG78 42-6EJ21
1050	Emitter	A	3RG78 45-4EJ00	A	3RG78 45-4EJ10		3RG78 42-6EJ20
1200	Receiver	A	3RG78 45-4EK01	A	3RG78 45-4EK11		3RG78 42-6EK21
1200	Emitter	A	3RG78 45-4EK00	A	3RG78 45-4EK10		3RG78 42-6EK20
1350	Receiver	A	3RG78 45-4EL01	A	3RG78 45-4EL11		3RG78 42-6EL21
1350	Emitter	A	3RG78 45-4EL00	A	3RG78 45-4EL10		3RG78 42-6EL20
1500	Receiver	A	3RG78 45-4EM01	A	3RG78 45-4EM11		3RG78 42-6EM21
1500	Emitter	A	3RG78 45-4EM00	A	3RG78 45-4EM10		3RG78 42-6EM20
1650	Receiver	A	3RG78 45-4EN01	A	3RG78 45-4EN11		3RG78 42-6EN21
1650	Emitter	A	3RG78 45-4EN00	A	3RG78 45-4EN10		3RG78 42-6EN20
1800	Receiver	A	3RG78 45-4EP01	A	3RG78 45-4EP11		3RG78 42-6EP21
1800	Emitter	A	3RG78 45-4EP00	A	3RG78 45-4EP10		3RG78 42-6EP20
2100	Receiver	A	3RG78 45-4ER01	A	3RG78 45-4ER11		3RG78 42-6ER21
2100	Emitter	A	3RG78 45-4ER00	A	3RG78 45-4ER10		3RG78 42-6ER20
2400	Receiver	A	3RG78 45-4ES01	A	3RG78 45-4ES11		3RG78 42-6ES21
2400	Emitter	A	3RG78 45-4ES00	A	3RG78 45-4ES10		3RG78 42-6ES20
2700	Receiver	A	3RG78 45-4ET01	A	3RG78 45-4ET11		3RG78 42-6ET21
2700	Emitter	A	3RG78 45-4ET00	A	3RG78 45-4ET10		3RG78 42-6ET20
3000	Receiver	A	3RG78 45-4EU01	A	3RG78 45-4EU11		3RG78 42-6EU21
3000	Emitter	A	3RG78 45-4EU00	A	3RG78 45-4EU10		3RG78 42-6EU20
<b>90 mm resolution</b>							
750	Receiver	A	3RG78 45-4JG01	A	3RG78 45-4JG11		3RG78 42-6JG21
750	Emitter	A	3RG78 45-4JG00	A	3RG78 45-4JG10		3RG78 42-6JG20
900	Receiver	A	3RG78 45-4JH01	A	3RG78 45-4JH11		3RG78 42-6JH21
900	Emitter	A	3RG78 45-4JH00	A	3RG78 45-4JH10		3RG78 42-6JH20
1050	Receiver	A	3RG78 45-4JJ01	A	3RG78 45-4JJ11		3RG78 42-6JJ21
1050	Emitter	A	3RG78 45-4JJ00	A	3RG78 45-4JJ10		3RG78 42-6JJ20
1200	Receiver	A	3RG78 45-4JK01	A	3RG78 45-4JK11		3RG78 42-6JK21
1200	Emitter	A	3RG78 45-4JK00	A	3RG78 45-4JK10		3RG78 42-6JK20
1350	Receiver	A	3RG78 45-4JL01	A	3RG78 45-4JL11		3RG78 42-6JL21
1350	Emitter	A	3RG78 45-4JL00	A	3RG78 45-4JL10		3RG78 42-6JL20
1500	Receiver	A	3RG78 45-4JM01	A	3RG78 45-4JM11		3RG78 42-6JM21
1500	Emitter	A	3RG78 45-4JM00	A	3RG78 45-4JM10		3RG78 42-6JM20
1650	Receiver	A	3RG78 45-4JN01	A	3RG78 45-4JN11		3RG78 42-6JN21
1650	Emitter	A	3RG78 45-4JN00	A	3RG78 45-4JN10		3RG78 42-6JN20

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

Internal evaluation

Protection height		Version		Standard device		Host device		Guest device	
mm				Order No.		Order No.		Order No.	
1800	Receiver	A		<b>3RG78 45-4JP01</b>	A	<b>3RG78 45-4JP11</b>		<b>3RG78 42-6JP21</b>	
1800	Emitter	A		<b>3RG78 45-4JP00</b>	A	<b>3RG78 45-4JP10</b>		<b>3RG78 42-6JP20</b>	
2100	Receiver	A		<b>3RG78 45-4JR01</b>	A	<b>3RG78 45-4JR11</b>		<b>3RG78 42-6JR21</b>	
2100	Emitter	A		<b>3RG78 45-4JR00</b>	A	<b>3RG78 45-4JR10</b>		<b>3RG78 42-6JR20</b>	
2400	Receiver	A		<b>3RG78 45-4JS01</b>	A	<b>3RG78 45-4JS11</b>		<b>3RG78 42-6JS21</b>	
2400	Emitter	A		<b>3RG78 45-4JS00</b>	A	<b>3RG78 45-4JS10</b>		<b>3RG78 42-6JS20</b>	
2700	Receiver	A		<b>3RG78 45-4JT01</b>	A	<b>3RG78 45-4JT11</b>		<b>3RG78 42-6JT21</b>	
2700	Emitter	A		<b>3RG78 45-4JT00</b>	A	<b>3RG78 45-4JT10</b>		<b>3RG78 42-6JT20</b>	
3000	Receiver	A		<b>3RG78 45-4JU01</b>	A	<b>3RG78 45-4JU11</b>		<b>3RG78 42-6JU21</b>	
3000	Emitter	A		<b>3RG78 45-4JU00</b>	A	<b>3RG78 45-4JU10</b>		<b>3RG78 42-6JU20</b>	

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Light arrays with standard function package transistor output with Brad Harrison connection (MIN-Series)<sup>1)</sup>

No. of beams	Beam distance	Version		Standard device	
	mm			Order No.	
<b>0.8 – 18 m range</b>					
4-beam	300	Receiver		A	<b>3RG78 45-4MH01</b>
4-beam	300	Emitter		A	<b>3RG78 45-4MH00</b>
3-beam	400	Receiver		A	<b>3RG78 45-4PG01</b>
3-beam	400	Emitter		A	<b>3RG78 45-4PG00</b>
2-beam	500	Receiver		A	<b>3RG78 45-4SE01</b>
2-beam	500	Emitter		A	<b>3RG78 45-4SE00</b>
<b>6 – 60 m range</b>					
4-beam	300	Receiver		A	<b>3RG78 45-4MH51</b>
4-beam	300	Emitter		A	<b>3RG78 45-4MH50</b>
3-beam	400	Receiver		A	<b>3RG78 45-4PG51</b>
3-beam	400	Emitter		A	<b>3RG78 45-4PG50</b>
2-beam	500	Receiver		A	<b>3RG78 45-4SE51</b>
2-beam	500	Emitter		A	<b>3RG78 45-4SE50</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Transceiver with standard function package transistor output with Brad Harrison connection (MIN-Series)<sup>1)</sup>

No. of beams	Beam distance	Version		Standard device	
	mm			Order No.	
<b>6.5 m range</b>					
2-beam	500	Transceiver		A	<b>3RG78 45-4TE01</b>
Reflective mirror for transceiver					<b>3RG78 48-1TL</b>

1) Required primarily for applications in the NAFTA market


A: Subject to export regulations: AL = N and ECCN = EAR99H

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# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

### Internal evaluation

Light curtains with standard function package  
transistor output with cable gland 

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
<b>14 mm resolution</b>				
150	Receiver	A 3RG78 45-6BB01	–	3RG78 42-6BB21
150	Emitter	A 3RG78 45-6BB00	–	3RG78 42-6BB20
225	Receiver	A 3RG78 45-6BC01	A 3RG78 45-6BC11	3RG78 42-6BC21
225	Emitter	A 3RG78 45-6BC00	A 3RG78 45-6BC10	3RG78 42-6BC20
300	Receiver	A 3RG78 45-6BD01	A 3RG78 45-6BD11	3RG78 42-6BD21
300	Emitter	A 3RG78 45-6BD00	A 3RG78 45-6BD10	3RG78 42-6BD20
450	Receiver	A 3RG78 45-6BE01	A 3RG78 45-6BE11	3RG78 42-6BE21
450	Emitter	A 3RG78 45-6BE00	A 3RG78 45-6BE10	3RG78 42-6BE20
600	Receiver	A 3RG78 45-6BF01	A 3RG78 45-6BF11	3RG78 42-6BF21
600	Emitter	A 3RG78 45-6BF00	A 3RG78 45-6BF10	3RG78 42-6BF20
750	Receiver	A 3RG78 45-6BG01	A 3RG78 45-6BG11	3RG78 42-6BG21
750	Emitter	A 3RG78 45-6BG00	A 3RG78 45-6BG10	3RG78 42-6BG20
900	Receiver	A 3RG78 45-6BH01	A 3RG78 45-6BH11	3RG78 42-6BH21
900	Emitter	A 3RG78 45-6BH00	A 3RG78 45-6BH10	3RG78 42-6BH20
1050	Receiver	A 3RG78 45-6BJ01	A 3RG78 45-6BJ11	3RG78 42-6BJ21
1050	Emitter	A 3RG78 45-6BJ00	A 3RG78 45-6BJ10	3RG78 42-6BJ20
1200	Receiver	A 3RG78 45-6BK01	A 3RG78 45-6BK11	3RG78 42-6BK21
1200	Emitter	A 3RG78 45-6BK00	A 3RG78 45-6BK10	3RG78 42-6BK20
1350	Receiver	A 3RG78 45-6BL01	A 3RG78 45-6BL11	3RG78 42-6BL21
1350	Emitter	A 3RG78 45-6BL00	A 3RG78 45-6BL10	3RG78 42-6BL20
1500	Receiver	A 3RG78 45-6BM01	A 3RG78 45-6BM11	3RG78 42-6BM21
1500	Emitter	A 3RG78 45-6BM00	A 3RG78 45-6BM10	3RG78 42-6BM20
1650	Receiver	A 3RG78 45-6BN01	A 3RG78 45-6BN11	3RG78 42-6BN21
1650	Emitter	A 3RG78 45-6BN00	A 3RG78 45-6BN10	3RG78 42-6BN20
1800	Receiver	A 3RG78 45-6BP01	A 3RG78 45-6BP11	3RG78 42-6BP21
1800	Emitter	A 3RG78 45-6BP00	A 3RG78 45-6BP10	3RG78 42-6BP20
<b>30 mm resolution</b>				
150	Receiver	A 3RG78 45-6DB01	–	3RG78 42-6DB21
150	Emitter	A 3RG78 45-6DB00	–	3RG78 42-6DB20
225	Receiver	A 3RG78 45-6DC01	A 3RG78 45-6DC11	3RG78 42-6DC21
225	Emitter	A 3RG78 45-6DC00	A 3RG78 45-6DC10	3RG78 42-6DC20
300	Receiver	A 3RG78 45-6DD01	A 3RG78 45-6DD11	3RG78 42-6DD21
300	Emitter	A 3RG78 45-6DD00	A 3RG78 45-6DD10	3RG78 42-6DD20
450	Receiver	A 3RG78 45-6DE01	A 3RG78 45-6DE11	3RG78 42-6DE21
450	Emitter	A 3RG78 45-6DE00	A 3RG78 45-6DE10	3RG78 42-6DE20
600	Receiver	A 3RG78 45-6DF01	A 3RG78 45-6DF11	3RG78 42-6DF21
600	Emitter	A 3RG78 45-6DF00	A 3RG78 45-6DF10	3RG78 42-6DF20
750	Receiver	A 3RG78 45-6DG01	A 3RG78 45-6DG11	3RG78 42-6DG21
750	Emitter	A 3RG78 45-6DG00	A 3RG78 45-6DG10	3RG78 42-6DG20
900	Receiver	A 3RG78 45-6DH01	A 3RG78 45-6DH11	3RG78 42-6DH21
900	Emitter	A 3RG78 45-6DH00	A 3RG78 45-6DH10	3RG78 42-6DH20
1050	Receiver	A 3RG78 45-6DJ01	A 3RG78 45-6DJ11	3RG78 42-6DJ21
1050	Emitter	A 3RG78 45-6DJ00	A 3RG78 45-6DJ10	3RG78 42-6DJ20
1200	Receiver	A 3RG78 45-6DK01	A 3RG78 45-6DK11	3RG78 42-6DK21
1200	Emitter	A 3RG78 45-6DK00	A 3RG78 45-6DK10	3RG78 42-6DK20
1350	Receiver	A 3RG78 45-6DL01	A 3RG78 45-6DL11	3RG78 42-6DL21
1350	Emitter	A 3RG78 45-6DL00	A 3RG78 45-6DL10	3RG78 42-6DL20

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

Internal evaluation

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
1500	Receiver	A 3RG78 45-6DM01	A 3RG78 45-6DM11	3RG78 42-6DM21
1500	Emitter	A 3RG78 45-6DM00	A 3RG78 45-6DM10	3RG78 42-6DM20
1650	Receiver	A 3RG78 45-6DN01	A 3RG78 45-6DN11	3RG78 42-6DN21
1650	Emitter	A 3RG78 45-6DN00	A 3RG78 45-6DN10	3RG78 42-6DN20
1800	Receiver	A 3RG78 45-6DP01	A 3RG78 45-6DP11	3RG78 42-6DP21
1800	Emitter	A 3RG78 45-6DP00	A 3RG78 45-6DP10	3RG78 42-6DP20
<b>50 mm resolution</b>				
450	Receiver	A 3RG78 45-6EE01	A 3RG78 45-6EE11	3RG78 42-6EE21
450	Emitter	A 3RG78 45-6EE00	A 3RG78 45-6EE10	3RG78 42-6EE20
600	Receiver	A 3RG78 45-6EF01	A 3RG78 45-6EF11	3RG78 42-6EF21
600	Emitter	A 3RG78 45-6EF00	A 3RG78 45-6EF10	3RG78 42-6EF20
750	Receiver	A 3RG78 45-6EG01	A 3RG78 45-6EG11	3RG78 42-6EG21
750	Emitter	A 3RG78 45-6EG00	A 3RG78 45-6EG10	3RG78 42-6EG20
900	Receiver	A 3RG78 45-6EH01	A 3RG78 45-6EH11	3RG78 42-6EH21
900	Emitter	A 3RG78 45-6EH00	A 3RG78 45-6EH10	3RG78 42-6EH20
1050	Receiver	A 3RG78 45-6EJ01	A 3RG78 45-6EJ11	3RG78 42-6EJ21
1050	Emitter	A 3RG78 45-6EJ00	A 3RG78 45-6EJ10	3RG78 42-6EJ20
1200	Receiver	A 3RG78 45-6EK01	A 3RG78 45-6EK11	3RG78 42-6EK21
1200	Emitter	A 3RG78 45-6EK00	A 3RG78 45-6EK10	3RG78 42-6EK20
1350	Receiver	A 3RG78 45-6EL01	A 3RG78 45-6EL11	3RG78 42-6EL21
1350	Emitter	A 3RG78 45-6EL00	A 3RG78 45-6EL10	3RG78 42-6EL20
1500	Receiver	A 3RG78 45-6EM01	A 3RG78 45-6EM11	3RG78 42-6EM21
1500	Emitter	A 3RG78 45-6EM00	A 3RG78 45-6EM10	3RG78 42-6EM20
1650	Receiver	A 3RG78 45-6EN01	A 3RG78 45-6EN11	3RG78 42-6EN21
1650	Emitter	A 3RG78 45-6EN00	A 3RG78 45-6EN10	3RG78 42-6EN20
1800	Receiver	A 3RG78 45-6EP01	A 3RG78 45-6EP11	3RG78 42-6EP21
1800	Emitter	A 3RG78 45-6EP00	A 3RG78 45-6EP10	3RG78 42-6EP20
2100	Receiver	A 3RG78 45-6ER01	A 3RG78 45-6ER11	3RG78 42-6ER21
2100	Emitter	A 3RG78 45-6ER00	A 3RG78 45-6ER10	3RG78 42-6ER20
2400	Receiver	A 3RG78 45-6ES01	A 3RG78 45-6ES11	3RG78 42-6ES21
2400	Emitter	A 3RG78 45-6ES00	A 3RG78 45-6ES10	3RG78 42-6ES20
2700	Receiver	A 3RG78 45-6ET01	A 3RG78 45-6ET11	3RG78 42-6ET21
2700	Emitter	A 3RG78 45-6ET00	A 3RG78 45-6ET10	3RG78 42-6ET20
3000	Receiver	A 3RG78 45-6EU01	A 3RG78 45-6EU11	3RG78 42-6EU21
3000	Emitter	A 3RG78 45-6EU00	A 3RG78 45-6EU10	3RG78 42-6EU20
<b>90 mm resolution</b>				
750	Receiver	A 3RG78 45-6JG01	A 3RG78 45-6JG11	3RG78 42-6JG21
750	Emitter	A 3RG78 45-6JG00	A 3RG78 45-6JG10	3RG78 42-6JG20
900	Receiver	A 3RG78 45-6JH01	A 3RG78 45-6JH11	3RG78 42-6JH21
900	Emitter	A 3RG78 45-6JH00	A 3RG78 45-6JH10	3RG78 42-6JH20
1050	Receiver	A 3RG78 45-6JJ01	A 3RG78 45-6JJ11	3RG78 42-6JJ21
1050	Emitter	A 3RG78 45-6JJ00	A 3RG78 45-6JJ10	3RG78 42-6JJ20
1200	Receiver	A 3RG78 45-6JK01	A 3RG78 45-6JK11	3RG78 42-6JK21
1200	Emitter	A 3RG78 45-6JK00	A 3RG78 45-6JK10	3RG78 42-6JK20
1350	Receiver	A 3RG78 45-6JL01	A 3RG78 45-6JL11	3RG78 42-6JL21
1350	Emitter	A 3RG78 45-6JL00	A 3RG78 45-6JL10	3RG78 42-6JL20
1500	Receiver	A 3RG78 45-6JM01	A 3RG78 45-6JM11	3RG78 42-6JM21
1500	Emitter	A 3RG78 45-6JM00	A 3RG78 45-6JM10	3RG78 42-6JM20
1650	Receiver	A 3RG78 45-6JN01	A 3RG78 45-6JN11	3RG78 42-6JN21
1650	Emitter	A 3RG78 45-6JN00	A 3RG78 45-6JN10	3RG78 42-6JN20

# SIMATIC FS400 light curtains and arrays

## Series 3RG78 45, type 4

### Internal evaluation

Protection height	Version	Standard device	Host device	Guest device
mm		Order No.	Order No.	Order No.
1800	Receiver	A <b>3RG78 45-6JP01</b>	A <b>3RG78 45-6JP11</b>	<b>3RG78 42-6JP21</b>
1800	Emitter	A <b>3RG78 45-6JP00</b>	A <b>3RG78 45-6JP10</b>	<b>3RG78 42-6JP20</b>
2100	Receiver	A <b>3RG78 45-6JR01</b>	A <b>3RG78 45-6JR11</b>	<b>3RG78 42-6JR21</b>
2100	Emitter	A <b>3RG78 45-6JR00</b>	A <b>3RG78 45-6JR10</b>	<b>3RG78 42-6JR20</b>
2400	Receiver	A <b>3RG78 45-6JS01</b>	A <b>3RG78 45-6JS11</b>	<b>3RG78 42-6JS21</b>
2400	Emitter	A <b>3RG78 45-6JS00</b>	A <b>3RG78 45-6JS10</b>	<b>3RG78 42-6JS20</b>
2700	Receiver	A <b>3RG78 45-6JT01</b>	A <b>3RG78 45-6JT11</b>	<b>3RG78 42-6JT21</b>
2700	Emitter	A <b>3RG78 45-6JT00</b>	A <b>3RG78 45-6JT10</b>	<b>3RG78 42-6JT20</b>
3000	Receiver	A <b>3RG78 45-6JU01</b>	A <b>3RG78 45-6JU11</b>	<b>3RG78 42-6JU21</b>
3000	Emitter	A <b>3RG78 45-6JU00</b>	A <b>3RG78 45-6JU10</b>	<b>3RG78 42-6JU20</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

### Light arrays with standard function package transistor output with cable gland

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>0.8 – 18 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-6MH01</b>
4-beam	300	Emitter	A <b>3RG78 45-6MH00</b>
3-beam	400	Receiver	A <b>3RG78 45-6PG01</b>
3-beam	400	Emitter	A <b>3RG78 45-6PG00</b>
2-beam	500	Receiver	A <b>3RG78 45-6SE01</b>
2-beam	500	Emitter	A <b>3RG78 45-6SE00</b>
<b>6 – 60 m range</b>			
4-beam	300	Receiver	A <b>3RG78 45-6MH51</b>
4-beam	300	Emitter	A <b>3RG78 45-6MH50</b>
3-beam	400	Receiver	A <b>3RG78 45-6PG51</b>
3-beam	400	Emitter	A <b>3RG78 45-6PG50</b>
2-beam	500	Receiver	A <b>3RG78 45-6SE51</b>
2-beam	500	Emitter	A <b>3RG78 45-6SE50</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

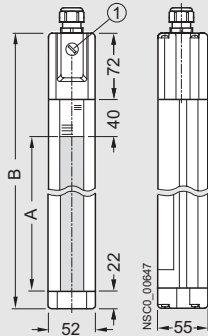
### Transceiver with standard function package transistor output with cable gland

No. of beams	Beam distance	Version	Standard device
	mm		Order No.
<b>6.5 m range</b>			
2-beam	500	Transceiver	A <b>3RG78 45-6TE01</b>
Reflective mirror for transceiver			<b>3RG78 48-1TL</b>

A: Subject to export regulations: AL = N and ECCN = EAR99H

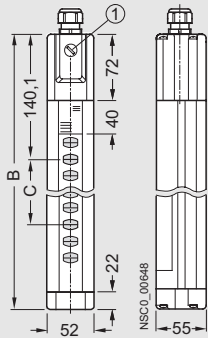
### Dimensional drawings

#### Standard 3RG78 45 light curtains and 3RG78 45 light arrays



- ① Pg 9 sealing cap (receiver only, for local interface)
- A Height of protective field (see selection and ordering data)
- B Total length = protection field height A + 134 mm

#### 3RG78 45 light arrays, additional dimensions



Additional dimensions for light arrays only:

Type	B (mm)	C (mm)	Beams
3RG78 45-..M	1,184	300	4
3RG78 45-..P	1,034	400	3
3RG78 45-..S	734	500	2

# SIMATIC FS400 light curtains and arrays

## Mounting parts

Type	Order No.
<b>Sliding blocks</b> (1 set = 2 units), M6	<b>3RG78 48-0AC</b>
<b>Muting mounting system</b> , total length 1000 mm with two 12 mm circular bars for light barrier mounting systems (see page 3/83)	<b>3RG78 48-2AF</b>
<b>Muting mounting system</b> , total length 1000 mm with 2 reflectors	A <b>3RG78 48-2LF</b>
<b>Muting mounting system for sequential muting</b> , total length 1000 mm with four 12 mm circular bars for light barrier mounting systems (see page 3/83)	<b>3RG784 8-2DF</b>
<b>Muting mounting system for sequential muting</b> , total length 1000 mm with 4 reflectors	A <b>3RG78 48-2KF</b>
<b>Muting mounting system</b> , total length 350 mm with two 12 mm circular bars for light barrier mounting systems (see page 3/83)	<b>3RG78 48-2GF</b>
<b>Muting mounting system to bolt mount directly to the unit</b> for 2 sensors with angular circular bars for light barrier mounting systems (see page 3/83)	<b>3RG78 48-2HF</b>
<b>Holding bar for mounting to muting mounting system</b> , diameter 12 mm, length 200 mm	<b>3RX7 315</b>
<b>Holding bar for mounting to muting mounting system</b> , diameter 12 mm, length 300 mm	<b>3RX7 316</b>
<b>Holding plate to hold sensor, mounting</b> on 12 mm circular bar for sensor holding system	<b>3RX7 326</b>
<b>Mounting base with 12 mm receptacle for fixing system</b>	<b>3RX7 322</b>

### Keys

<b>Safety key</b> for teach-in	<b>3RG78 48-2AH</b>
<b>Magnetic key</b> for alignment display	<b>3RG78 48-2BH</b>



### Laser alignment aids

Standard version (only for use in conjunction with type 4 light curtain)	<b>3RG78 48-1AB</b>
For installation with fixing columns	<b>3RG78 48-1AG</b>
For light barriers and laser scanners	A <b>3RG7848-1AP</b>

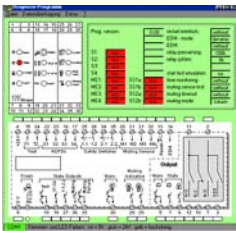


### Test rods

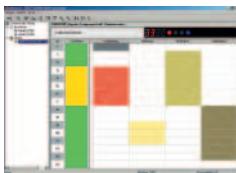
for 3RG78 41 and 3RG78 45, resolutions 14 mm and 30 mm	<b>3RG78 48-0AH</b>
Set for 3RG78 44 light curtains	<b>3RG78 48-0FH</b>

### Diagnostics software

for evaluation units, including PC cable	<b>3RG78 48-4AC</b>
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SafetyLab diagnostics and parameterization software with PC cable C	<b>3RG78 48-2SL</b>
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PC connecting lead, including connector, 9-pole with optical interface	<b>3RG78 38-1DC</b>
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A: Subject to export regulations: AL = N and ECCN = EAR99H