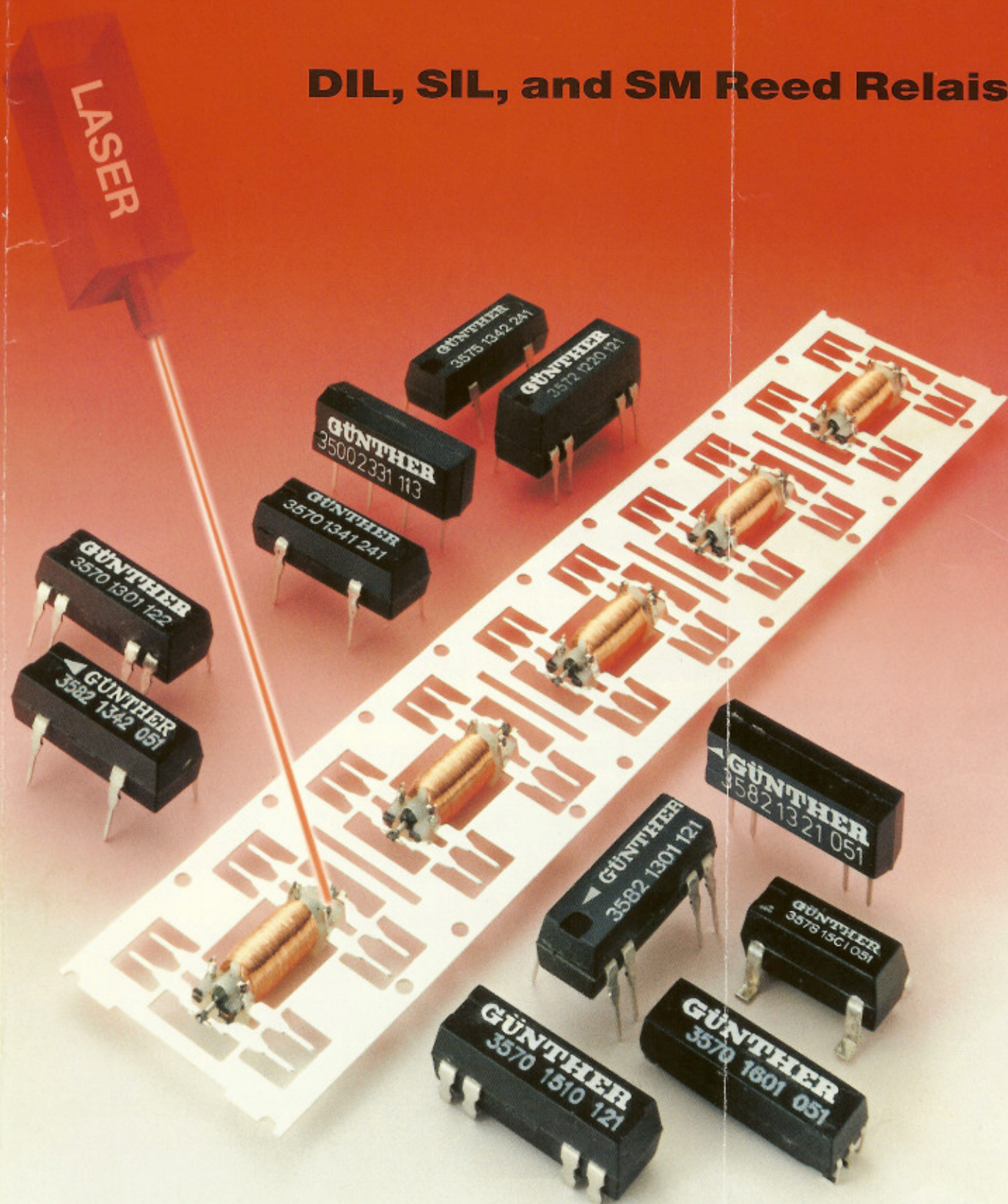
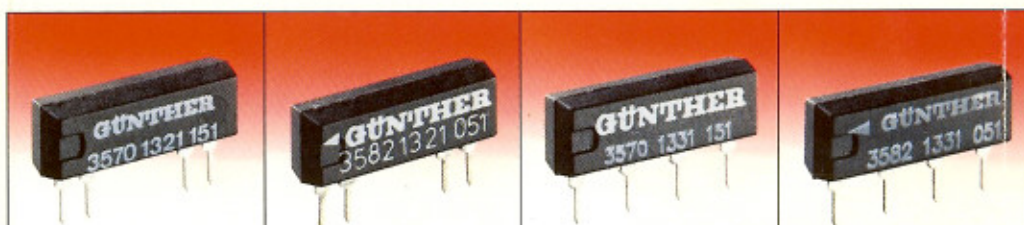


DIL, SIL, and SM Reed Relais



DIL, SIL, SM REED RELAYS



Versions	Single-In-Line			
Contact Form	Normally-Open	Normally-Open	Normally-Open	Normally-Open
Type	3570 1321... ¹⁾	3582 1321... ¹⁾	3570 1331... ¹⁾	3582 1331... ¹⁾
Features	• High dielectric strength • High switching capacity • Constant contact resistance • Bounce-free operation • High insulation resistance		Stand-offs • High dielectric strength • High switching capacity • Constant contact resistance • Bounce-free operation • High insulation resistance	

COIL PARAMETERS

Nominal Coil Voltage	VDC	5	12	15	24	5	12	15	24	5	12	15	24	5	12	15	24
Pull-In Voltage	max. VDC	3,5	8	11,5	16	4	9,6	12	19,2	3,5	8	11,5	16	4	9,6	12	19,2
Drop-Out Voltage	min. VDC	1	2	3	4	0,5	1,0	1,5	2	1	2	3	4	0,5	1,0	1,5	2
Coil Resistance	± 10% Ohms	380	530	2000	200	500	1000	2000	380	530	2000	200	500	1000	2000		

CONTACT PARAMETERS

Switching Capacity	max.	W/VA	10	50	10	50
Switching Voltage	max.	VAC	100	350	100	350
Switching Current	max.	A	0,5	1,0	0,5	1,0
Limiting Current	max.	A	1,0	2,0	1,0	2,0
Contact Resistance	max.	m Ohms	150	50	150	50
Dielectric Strength	min.	VDC	200	2000	200	2000

RELAY PARAMETERS

		350	1000	350	1000
Dielectric Strength	min VDC	350	1000	350	1000
Insulation Resistance	type Ohms	10^{10}	10^{10}	10^{10}	10^{10}
Storage Temperature	Range °C	-55...+105	-35...+105	-55...+105	-35...+105
Operating Temperature	Range °C	-35...+ 85	-20...+ 85	-35...+ 85	-20...+ 85
Pull-In Time	ms	<1	<3	<1	<3
Drop-Out Time	ms	<0,4	<2	<0,4	<2
Weight (approx.)	g	1,6	1,8	1,6	1,8
Dimensions	mm				
Pin Configuration	(top view)				

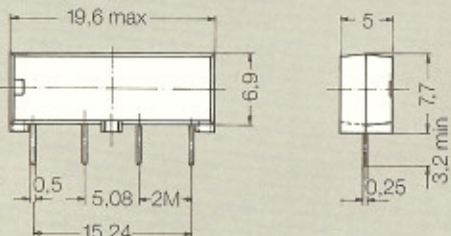
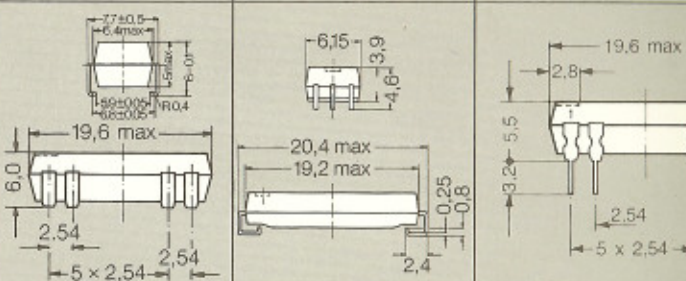
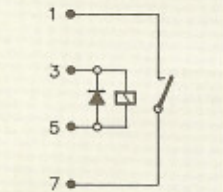
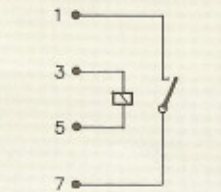
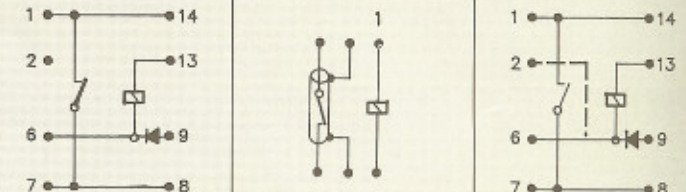
¹⁾ Available with diode ²⁾ Available with shielding and/or diode
All parameters measured at 25° C with new switches.

				
Single-In-Line			Surface-Mount	
Normally-Open	Normally-Open		Normally-Open	Normally-Open
3500 2331 061 ¹⁾	3500 2331 113 ¹⁾		3570 1510... ¹⁾	3570 1301... ²⁾
• High insulation resistance 10^{12} Ohms	• High switching voltage		Gull wing and "J" versions	
			• Coaxial version • $Z_0 = 75$ Ohms	
				• Industry-standard housing

5	12		5	12	15	24	5	5	12	15	24
3,7	8,6		3,5	8	11,5	16	3,8	3,5	8	11,5	16
0,7	1,5		1	2	3	4	0,5	1	2	3	4
380	1000		380	530	2000		150	380	530	2000	

10	10		10	10	10	10
100	200		100	100	100	100
0,5	0,5		0,5	0,5	0,5	0,5
1,0	1,0		1,0	1,0	1,0	1,0
150	100		150	150	150	150
200	500		250	250	250	250

500	1000		500	720	350
10^{12}	10^{10}		10^{10}	10^{10}	10^{10}
-55...+105	-55...+105		-55...+105	-55...+115	-55...+105
-35...+ 85	-35...+ 85		-35...+ 85	-35...+ 75	-35...+ 85
<0,6	<0,6		<1	<1	<1
<0,3	<0,4		<0,4	<0,4	<0,4
1,6	1,6		1,6	1,6	1,8

Ordering Number Code:

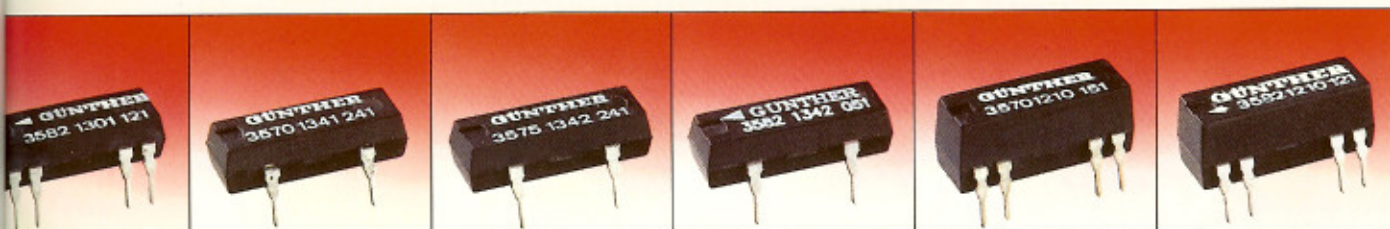
Basic Type

3570 1301 ...

Versions: 1 = standard, 2 = with shielding, 3 = with diode, 4 = with both shielding

Voltage: 05 = 5 V, 12 = 12 V, 15 = 15 V, 24 = 24 V

GÜNTHER GÜNTHER GÜNTHER GÜNTHER

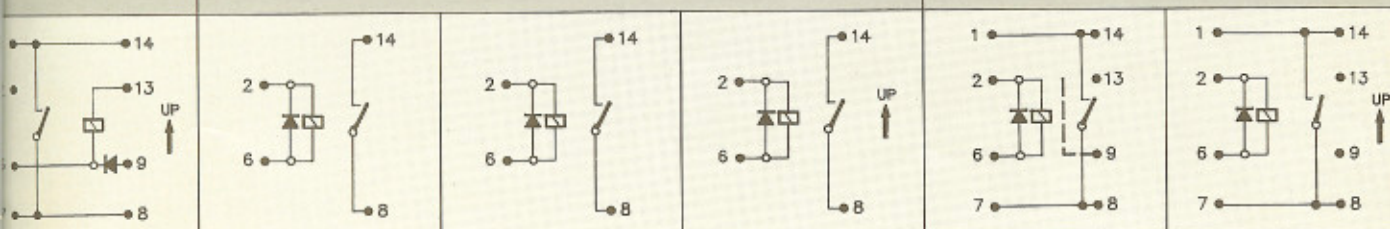
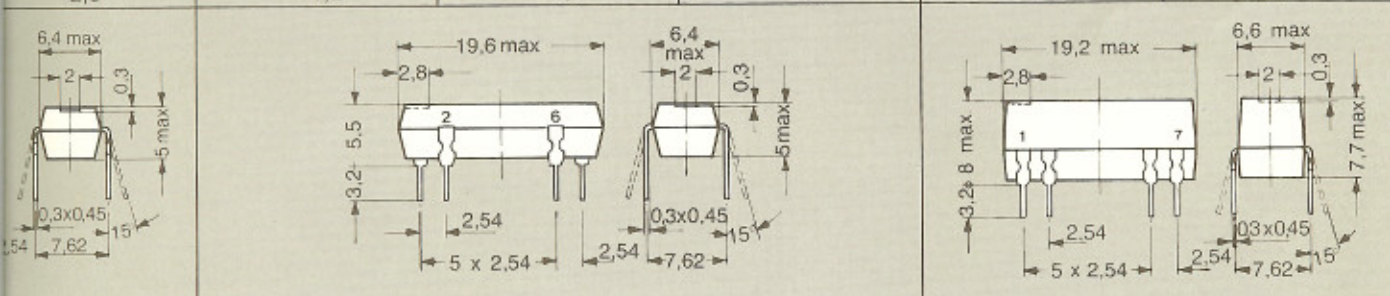


Dual-In-Line (Low Profile)				Dual-In-Line (High Profile)	
Normally-Open	Normally-Open	Normally-Open	Normally-Open	Normally-Open	Normally-Open
3582 1301... ¹⁾	3570 1341... ¹⁾	3575 1342... ¹⁾	3582 1342... ¹⁾	3570 1210... ²⁾	3582 1210... ¹⁾
• High dielectric strength • High switching capacity • Constant contact resistance • Bounce-free operation • High insulation resistance	• High insulation resistance	• High dielectric strength • Designed to switch 220 V supply voltage	• High dielectric strength	• Industry-standard housing • Low input power	• High dielectric strength • High switching capacity • Constant contact resistance • Bounce-free operation • High insulation resistance

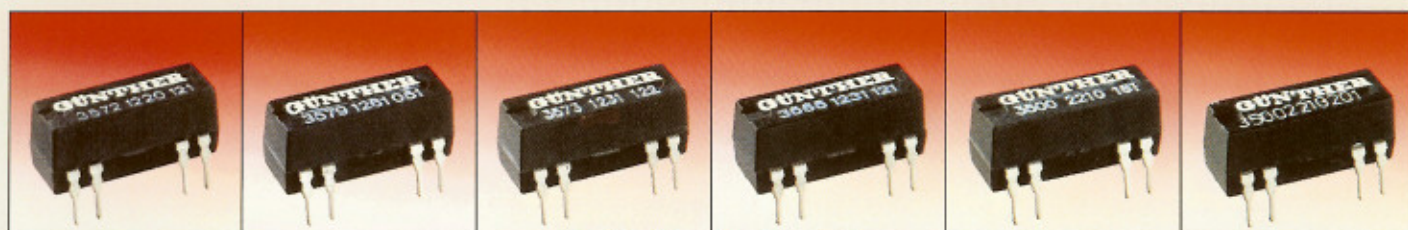
12	15	24	5	12	15	24	5	12	15	24	5	12	15	24	5	12	15	24	5	12	15	24
9,6	12	19,2	3,5	8	11,5	16	3,5	8	11,5	16	4	9,6	12	19,2	3,5	8	11,5	16	4	9,6	12	19,2
1	1,5	2	1	2	3	4	1	2	3	4	0,5	1	1,5	2	1	2	3	4	0,5	1	1,5	2
500	1000	2000	380	530	2000	380	530	2000	200	500	2000	500	1000	2150	200	500	2000					

50	10	8	50	10	50
350	100	220	400	100	350
1,0	0,5	0,5	1,0	0,5	1,0
2,0	1,0	1,0	1,5	1,0	2,0
50	150	150	50	150	50
2000	250	420	2000	200	2000

1000	350	3000	4200	350	1000
10 ¹⁰	10 ¹²	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰
-35...+105	-55...+105	-55...+105	-35...+105	-55...+105	-35...+105
-20...+ 85	-35...+ 85	-35...+ 85	-20...+ 85	-35...+ 85	-20...+ 85
<3	<1	<1	<3	<1	<3
<2	<0,4	<0,4	<2	<0,4	<2
2,0	1,6	1,6	1,8	2,3	2,5



GÜNTHER GÜNTHER GÜNTHER GÜNTHER



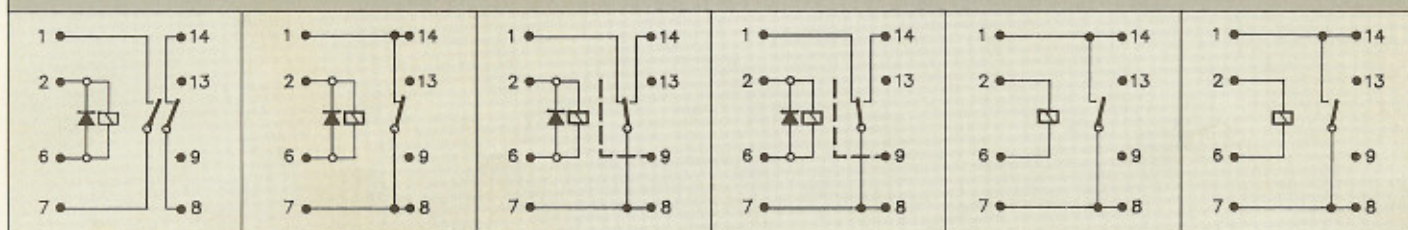
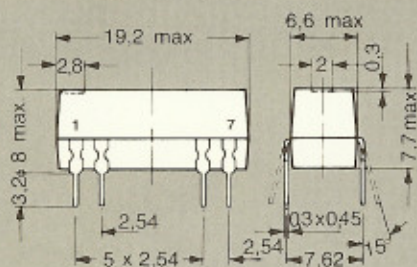
Dual-In-Line (High Profile)

Normally-Open 3572 1220... ¹⁾	Normally-Closed 3579 1261... ¹⁾	Change-Over 3573 1231... ²⁾	Change-Over 3565 1231... ²⁾	Normally-Open 3500 2210 161	Normally-Open 3500 2210 201 ²⁾
• Industry-standard housing • 2 Form A	• Industry-standard housing • Low input power	• Industry-standard housing • Available with 20 W contacts	• Industry-standard housing • High switching power • High switching current	• ATE version	• Low input power

5	12	15	24	5	12	15	24	5	12	15	24	5	12	15	24	5	5
3,5	8	11,5	16	3,5	8	11,5	16	3,5	8	11,5	16	3,5	8	11,5	16	4,2	4,2
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	0,4	1
200	500	850	2150	500	1000	2150	200	500	850	2150	200	500	850	2150	500	500	1000

10	10	5	20	10	10
100	100	100	100	300	300
0,5	0,5	0,5	1,0	0,5	0,5
1,0	1,0	1,0	1,5	1,0	1,0
150	150	100	100	150	200
200	200	200	200	700	500

350	350	350	350	700	500
10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹¹	10 ⁹
-55...+105	-55...+105	-55...+105	-55...+105	-55...+105	-55...+105
-35...+ 85	-35...+ 85	-35...+ 85	-35...+ 85	-35...+ 85	-35...+ 85
<1,5	<1,2	<1,2	<1,2	<1	<1
<0,8	<0,8	<0,8	<0,8	<0,4	<0,4
2,3	2,3	2,3	2,3	2,3	2,3



Engineering Information

Capacitance (in pF)	Normally-Open	Normally-Closed	Change-Over
Across open contacts	0.8	0.8	0.6
Between open contacts and coil	1.5	2.0	2.0
Between closed contacts and coil	3.0	3.0	2.5

Vibration Resistance

20 g, 10 to 500 Hz at nominal coil voltage

Shock Resistance

50 g, 11 ms sine half-wave at nominal coil voltage

Maximum Operating Voltage

At temperatures above 220°C - a function of increased ambient temperature.

Solderability

All relays meet the DIN 8505 requirements.

SM relays are solderable according to most SM-soldering processes due to laser-welded internal joints.

Washability

Kaltron, Freon, Alcohol, distilled water

Production Information

Reed Switch Sourcing

Many years of reed switch development and production enable Günther to design their own innovative switches for use in their reed relays.

Automation

Extensive automation and use of laser technology guarantee a smooth flowing production at constant quality levels.

Quality Control

Günther's strenuous quality control program specifies that each component is tested in accordance with international standards as well as specific customer requirements.

Delivery

Just-in-time delivery requirements are made possible by Günther's total control of reed switch production and reed relay assembly.

For more information, please contact:

GERMANY

W. GÜNTHER GMBH
VIRNSBERGER STR. 51
D-8500 NÜRNBERG 82
TEL. (09 11) 6 55 20, TELEX 622 351 wigu d,
Fax (09 11) 6 552 239

0389/2 F2 E Printed in W. Germany

FRANCE

GÜNTHER FRANCE S.A.
46 RUE HOCHÉ
F-92400 COURBEVOIE
TEL. (01) 4788.42.10
FAX. (01) 4789.19.03

Due to continual technical research and development, any given values are subject to change without notice.

SWITZERLAND

GÜNTHER GMBH
RHEINSTRASSE 30-32
CH-4302 AUGST/BL
TEL. (061) 83 29 21, 83 29 22, TELEX 968 063 guen ch,
FAX (061) 83 24 26