



# TMC 7 and TMC 8 series overcurrent protection

Thermal-magnetic supplementary protectors and circuit breakers

# TMC 7 and TMC 8 series

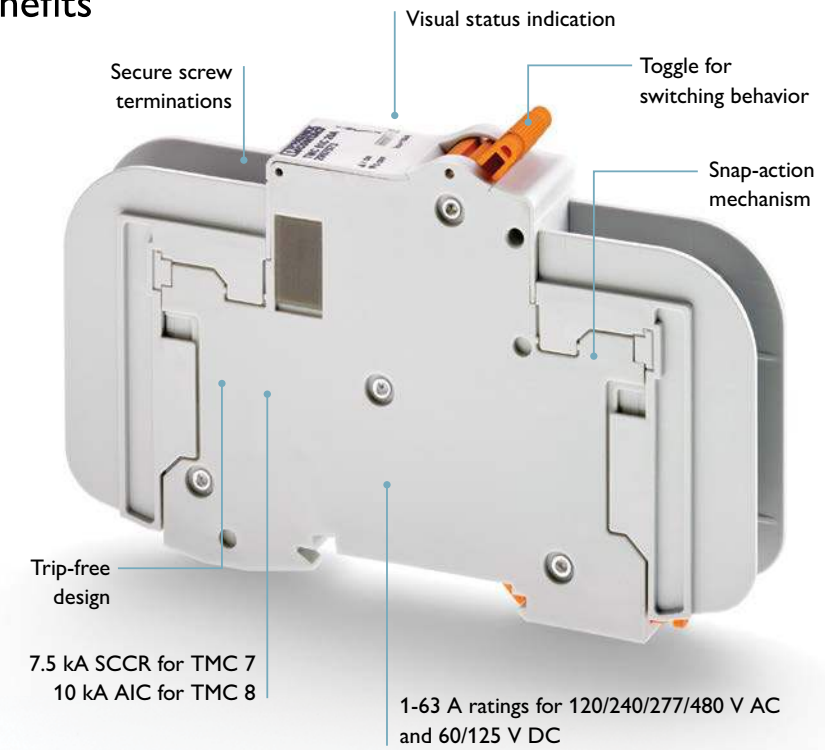
## Thermal-magnetic overcurrent protection

The TMC 7 series supplementary protectors and TMC 8 series circuit breakers are composed of 1-pole, 2-pole, and 3-pole thermal-magnetic miniature circuit breakers (MCBs) available in industry standard B-, C-, and D-trip curves for DIN rail-mounted applications. The breakers comply with UL 1077, UL 489, and EN 60947-2 accordingly, and are marked with the appropriate approvals.

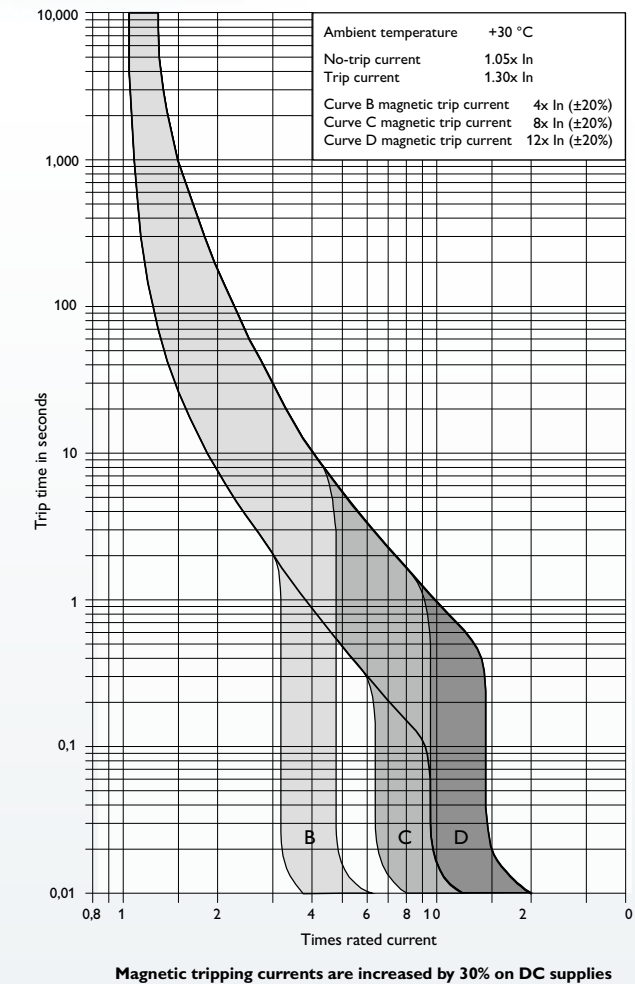
These dual-rated breakers are equipped with toggle actuation and visual status indication, and are ideal for overcurrent protection of circuits and loads. A trip-free, snap-action mechanism ensures reliable switching behavior for use in switchgear, panel boards, and electrical equipment.

Phoenix Contact's TMC 7 series supplementary protectors and TMC 8 series circuit breakers are rated for use in systems up to 277/480 V AC and 60/125 V DC.

## Features and benefits



Features	Benefits
Visual status indication	Easily identify circuit status
A wide range of currents	1-63 A versions for optimizing system reliability
1-, 2-, and 3-pole versions	Configurations for all applications
B-, C-, and D-curves	A single product line with trip curves for all load types
Dual rated (AC/DC)	Single part number with both AC and DC ratings, reducing inventory requirements
Snap-action mechanism	Eliminates contact welding and reduces contact wear
Trip-free design	Increased safety against closing during an overcurrent event
UL 508 Listed cuttable busbar	Flexible, easy bridging of power and accessories
Multiple accessories	Provide added functionality and system status information



Magnetic tripping currents are increased by 30% on DC supplies

## Trip characteristics

The TMC 7 and TMC 8 series includes a range of trip characteristics for a variety of applications: B-, C-, and D-curves.

Curve	Application
B	<ul style="list-style-type: none"> <li>Heaters</li> <li>Sensitive equipment</li> </ul>
C	<ul style="list-style-type: none"> <li>Small transformers</li> <li>Lighting</li> <li>Pilot devices</li> <li>Control circuits and coils</li> </ul>
D	<ul style="list-style-type: none"> <li>Motors</li> <li>Generators</li> </ul>

# TMC 7 series supplementary protectors



The supplementary protectors in the TMC 7 series are ideal for device protection in systems that require reliable overcurrent protection, and where ease of installation, maintenance, and repair is required.

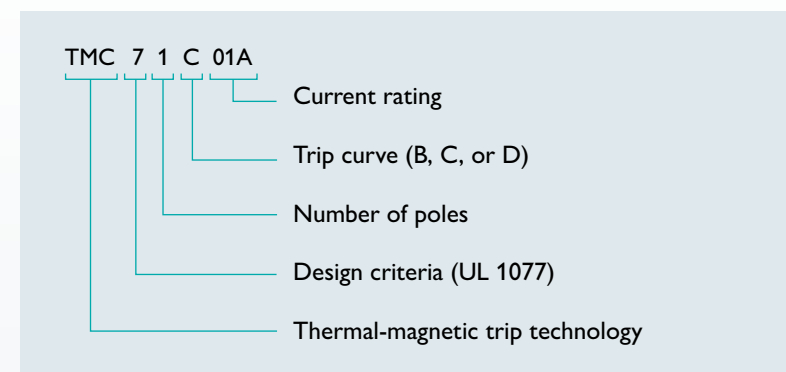
These devices increase system reliability by isolating problematic circuits from an application, which allows the rest of the system to remain up and running. Installation is simple and easy, and the cuttable UL 508 Listed bus bars can significantly reduce installation time.

Longevity is increased and maintenance minimized through the use of snap-action technology that reduces wear and tear on the internal contacts of the device. Safety is ensured with the trip-free design to eliminate closing the circuit during an overcurrent event.

Additional functionality is provided through optional, snap-on accessories: shunt trip, alarm, and auxiliary contacts. The series also offers multiple trip curves, pole configurations, and dual-rated (AC/DC) versions.

Ampere rating (A)	B Curve						C Curve						D Curve					
	1 Pole		2 Pole		3 Pole		1 Pole		2 Pole		3 Pole		1 Pole		2 Pole		3 Pole	
1	TMC 71B 01A	1011962	TMC 72B 01A	1019930	TMC 73B 01A	1019951	TMC 71C 01A	1019972	TMC 72C 01A	1019994	TMC 73C 01A	1020015	TMC 71D 01A	1020037	TMC 72D 01A	1020060	TMC 73D 01A	1020082
2	TMC 71B 02A	1019909	TMC 72B 02A	1019931	TMC 73B 02A	1019952	TMC 71C 02A	1019973	TMC 72C 02A	1019995	TMC 73C 02A	1020016	TMC 71D 02A	1020038	TMC 72D 02A	1020061	TMC 73D 02A	1020083
3	TMC 71B 03A	1019910	TMC 72B 03A	1019932	TMC 73B 03A	1019953	TMC 71C 03A	1019974	TMC 72C 03A	1019996	TMC 73C 03A	1020017	TMC 71D 03A	1020039	TMC 72D 03A	1020062	TMC 73D 03A	1020084
4	TMC 71B 04A	1019911	TMC 72B 04A	1019933	TMC 73B 04A	1019954	TMC 71C 04A	1019975	TMC 72C 04A	1019997	TMC 73C 04A	1020018	TMC 71D 04A	1020040	TMC 72D 04A	1020064	TMC 73D 04A	1020085
5	TMC 71B 05A	1019912	TMC 72B 05A	1019934	TMC 73B 05A	1019955	TMC 71C 05A	1019976	TMC 72C 05A	1019998	TMC 73C 05A	1020019	TMC 71D 05A	1020041	TMC 72D 05A	1020065	TMC 73D 05A	1020086
6	TMC 71B 06A	1019913	TMC 72B 06A	1019935	TMC 73B 06A	1019956	TMC 71C 06A	1019977	TMC 72C 06A	1019999	TMC 73C 06A	1020020	TMC 71D 06A	1020042	TMC 72D 06A	1020066	TMC 73D 06A	1020087
7	TMC 71B 07A	1019914	TMC 72B 07A	1019936	TMC 73B 07A	1019957	TMC 71C 07A	1019978	TMC 72C 07A	1020000	TMC 73C 07A	1020021	TMC 71D 07A	1020043	TMC 72D 07A	1020067	TMC 73D 07A	1020088
8	TMC 71B 08A	1019915	TMC 72B 08A	1019937	TMC 73B 08A	1019958	TMC 71C 08A	1019979	TMC 72C 08A	1020001	TMC 73C 08A	1020022	TMC 71D 08A	1020044	TMC 72D 08A	1020068	TMC 73D 08A	1020090
10	TMC 71B 10A	1019916	TMC 72B 10A	1019938	TMC 73B 10A	1019959	TMC 71C 10A	1019980	TMC 72C 10A	1020002	TMC 73C 10A	1020023	TMC 71D 10A	1020045	TMC 72D 10A	1020069	TMC 73D 10A	1020091
12	TMC 71B 12A	1019917	TMC 72B 12A	1019939	TMC 73B 12A	1019960	TMC 71C 12A	1019981	TMC 72C 12A	1020003	TMC 73C 12A	1020024	TMC 71D 12A	1020046	TMC 72D 12A	1020070	TMC 73D 12A	1020093
13	TMC 71B 13A	1019918	TMC 72B 13A	1019940	TMC 73B 13A	1019961	TMC 71C 13A	1019982	TMC 72C 13A	1020004	TMC 73C 13A	1020025	TMC 71D 13A	1020048	TMC 72D 13A	1020071	TMC 73D 13A	1020094
15	TMC 71B 15A	1019919	TMC 72B 15A	1019941	TMC 73B 15A	1019962	TMC 71C 15A	1019983	TMC 72C 15A	1020005	TMC 73C 15A	1020026	TMC 71D 15A	1020049	TMC 72D 15A	1020072	TMC 73D 15A	1020095
16	TMC 71B 16A	1019920	TMC 72B 16A	1019942	TMC 73B 16A	1019963	TMC 71C 16A	1019984	TMC 72C 16A	1020006	TMC 73C 16A	1020027	TMC 71D 16A	1020051	TMC 72D 16A	1020073	TMC 73D 16A	1020096
20	TMC 71B 20A	1019921	TMC 72B 20A	1019943	TMC 73B 20A	1019964	TMC 71C 20A	1019985	TMC 72C 20A	1020007	TMC 73C 20A	1020028	TMC 71D 20A	1020052	TMC 72D 20A	1020074	TMC 73D 20A	1020097
25	TMC 71B 25A	1019922	TMC 72B 25A	1019944	TMC 73B 25A	1019965	TMC 71C 25A	1019986	TMC 72C 25A	1020008	TMC 73C 25A	1020029	TMC 71D 25A	1020053	TMC 72D 25A	1020075	TMC 73D 25A	1020098
30	TMC 71B 30A	1019923	TMC 72B 30A	1019945	TMC 73B 30A	1019966	TMC 71C 30A	1019987	TMC 72C 30A	1020009	TMC 73C 30A	1020030	TMC 71D 30A	1020054	TMC 72D 30A	1020076	TMC 73D 30A	1020099
32	TMC 71B 32A	1019924	TMC 72B 32A	1019946	TMC 73B 32A	1019967	TMC 71C 32A	1019988	TMC 72C 32A	1020010	TMC 73C 32A	1020031	TMC 71D 32A	1020055	TMC 72D 32A	1020077	TMC 73D 32A	1020100
40	TMC 71B 40A	1019925	TMC 72B 40A	1019947	TMC 73B 40A	1019968	TMC 71C 40A	1019989	TMC 72C 40A	1020011	TMC 73C 40A	1020032	TMC 71D 40A	1020056	TMC 72D 40A	1020078	TMC 73D 40A	1020101
50	TMC 71B 50A	1019926	TMC 72B 50A	1019948	TMC 73B 50A	1019969	TMC 71C 50A	1019990	TMC 72C 50A	1020012	TMC 73C 50A	1020033	TMC 71D 50A	1020057	TMC 72D 50A	1020079	TMC 73D 50A	1020103
60	TMC 71B 60A	1019927	TMC 72B 60A	1019949	TMC 73B 60A	1019970	TMC 71C 60A	1019991	TMC 72C 60A	1020013	TMC 73C 60A	1020035	TMC 71D 60A	1020058	TMC 72D 60A	1020080	TMC 73D 60A	1020104
63	TMC 71B 63A	1019928	TMC 72B 63A	1019950	TMC 73B 63A	1019971	TMC 71C 63A	1019992	TMC 72C 63A	1020014	TMC 73C 63A	1020036	TMC 71D 63A	1020059	TMC 72D 63A	1020081	TMC 73D 63A	1020105

## Product description breakdown



## Accessories

Part number	PN description	Description
1022238	TMC 7 B1 80 57 C	Single-pole, 57-position cuttable busbar
1022237	TMC 7 B1 80 37 CA	Single pole with accessory, 37-position cuttable busbar
1022236	TMC 7 B2 80 56 C	Double-pole, 56-position cuttable busbar
1022235	TMC 7 B2 80 46 CA	Double pole with accessory, 46-position cuttable busbar
1022234	TMC 7 B3 80 57 C	Three-pole, 57-position cuttable busbar
1025400	TMC 7 B3 80 48 CA	Three pole with accessory, 48-position cuttable busbar
1022233	TMC 7 B1 TERM	Wiring termination for single pole
1022232	TMC 7 B2/3 TERM	Wiring termination for 2 and 3 pole
1022231	TMC 7 B1 END CAP	Insulating end cap for busbar after cutting to length - single pole
1022229	TMC 7 B2/3 END CAP	Insulating end cap for busbar after cutting to length - 2 and 3 pole
1022224	TMC 7 B BUS CAP	Touch-safe cap for busbar terminations
2908219	TMC 7/8 AUX	Contact for notification of breaker actuation
2908220	TMC 7/8 ALARM	Contact for indicating overcurrent trip
2908221	TMC 7/8 12VDC SHNT	12 V DC input for remote trip
2908222	TMC 7/8 24VDC SHNT	24 V DC input for remote trip
2908224	TMC 7/8 48VDC SHNT	48 V DC input for remote trip
2908225	TMC 7/8 125VDC SHNT	125 V DC input for remote trip
2908226	TMC 7/8 120VAC SHNT	120 V AC input for remote trip
2908227	TMC 7/8 240VAC SHNT	240 V AC input for remote trip
2908228	TMC 7/8 277VAC SHNT	277 V AC input for remote trip



# TMC 8 series circuit breakers



The TMC 8 series is composed of 1-pole, 2-pole, and 3-pole thermal-magnetic miniature circuit breakers (MCBs) in accordance with UL 489 and EN 60947-2 for DIN rail-mounted applications.

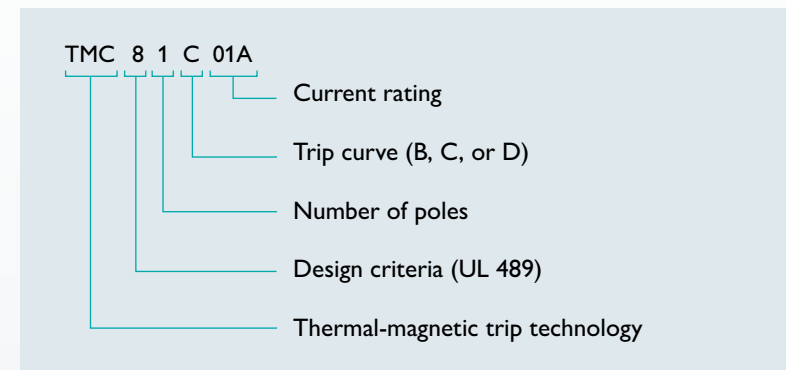
These dual-rated breakers are equipped with toggle actuation, visual status indication, and high-rated interrupting capacity and are meant to protect branch circuit conductors. A trip-free snap-action mechanism ensures reliable switching behavior for use in switchgear, panel boards, and electrical equipment.

Phoenix Contact's TMC 8 breakers are rated for use in systems up to 277/480 V AC and 60/125 V DC with a 10 kA short-circuit current rating.



Ampere rating (A)	B Curve						C Curve						D Curve					
	1 Pole		2 Pole		3 Pole		1 Pole		2 Pole		3 Pole		1 Pole		2 Pole		3 Pole	
1	TMC 81B 01A	2907478	TMC 82B 01A	2907502	TMC 83B 01A	2907539	TMC 81C 01A	2907558	TMC 82C 01A	2907582	TMC 83C 01A	2907607	TMC 81D 01A	2907626	TMC 82D 01A	2907650	TMC 83D 01A	2907674
2	TMC 81B 02A	2907479	TMC 82B 02A	2907503	TMC 83B 02A	2907540	TMC 81C 02A	2907559	TMC 82C 02A	2907584	TMC 83C 02A	2907608	TMC 81D 02A	2907627	TMC 82D 02A	2907652	TMC 83D 02A	2907675
3	TMC 81B 03A	2907480	TMC 82B 03A	2907504	TMC 83B 03A	2907542	TMC 81C 03A	2907560	TMC 82C 03A	2907585	TMC 83C 03A	2907609	TMC 81D 03A	2907628	TMC 82D 03A	2907653	TMC 83D 03A	2907676
4	TMC 81B 04A	2907481	TMC 82B 04A	2907505	TMC 83B 04A	2907543	TMC 81C 04A	2907561	TMC 82C 04A	2907586	TMC 83C 04A	2907610	TMC 81D 04A	2907629	TMC 82D 04A	2907654	TMC 83D 04A	2907678
5	TMC 81B 05A	2907482	TMC 82B 05A	2907506	TMC 83B 05A	2907544	TMC 81C 05A	2907562	TMC 82C 05A	2907587	TMC 83C 05A	2907611	TMC 81D 05A	2907630	TMC 82D 05A	2907655	TMC 83D 05A	2907679
6	TMC 81B 06A	2907483	TMC 82B 06A	2907507	TMC 83B 06A	2907545	TMC 81C 06A	2907563	TMC 82C 06A	2907588	TMC 83C 06A	2907612	TMC 81D 06A	2907631	TMC 82D 06A	2907656	TMC 83D 06A	2907681
7	TMC 81B 07A	2907484	TMC 82B 07A	2907508	TMC 83B 07A	2907546	TMC 81C 07A	2907564	TMC 82C 07A	2907589	TMC 83C 07A	2907613	TMC 81D 07A	2907632	TMC 82D 07A	2907657	TMC 83D 07A	2907682
8	TMC 81B 08A	2907485	TMC 82B 08A	2907510	TMC 83B 08A	2907547	TMC 81C 08A	2907565	TMC 82C 08A	2907590	TMC 83C 08A	2907614	TMC 81D 08A	2907633	TMC 82D 08A	2907658	TMC 83D 08A	2907683
10	TMC 81B 10A	2907487	TMC 82B 10A	2907511	TMC 83B 10A	2907548	TMC 81C 10A	2907566	TMC 82C 10A	2907591	TMC 83C 10A	2907615	TMC 81D 10A	2907634	TMC 82D 10A	2907659	TMC 83D 10A	2907684
12	TMC 81B 12A	2907488	TMC 82B 12A	2907512	TMC 83B 12A	2907549	TMC 81C 12A	2907568	TMC 82C 12A	2907592	TMC 83C 12A	2907616	TMC 81D 12A	2907636	TMC 82D 12A	2907660	TMC 83D 12A	2907685
13	TMC 81B 13A	2907489	TMC 82B 13A	2907513	TMC 83B 13A	2907550	TMC 81C 13A	2907569	TMC 82C 13A	2907593	TMC 83C 13A	2907617	TMC 81D 13A	2907637	TMC 82D 13A	2907661	TMC 83D 13A	2907686
15	TMC 81B 15A	2907490	TMC 82B 15A	2907514	TMC 83B 15A	2907551	TMC 81C 15A	2907571	TMC 82C 15A	2907594	TMC 83C 15A	2907618	TMC 81D 15A	2907638	TMC 82D 15A	2907662	TMC 83D 15A	2907687
16	TMC 81B 16A	2907491	TMC 82B 16A	2907515	TMC 83B 16A	2907552	TMC 81C 16A	2907572	TMC 82C 16A	2907595	TMC 83C 16A	2907620	TMC 81D 16A	2907639	TMC 82D 16A	2907663	TMC 83D 16A	2907688
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30	TMC 81B 30A	2907494	TMC 82B 30A	2907531	TMC 83B 30A	2907556	TMC 81C 30A	2907575	TMC 82C 30A	2907599	TMC 83C 30A	2907624	TMC 81D 30A	2907642	TMC 82D 30A	2907667	TMC 83D 30A	2907691
32	TMC 81B 32A	2907495	TMC 82B 32A	2907532	TMC 83B 32A	2907557	TMC 81C 32A	2907576	TMC 82C 32A	2907600	TMC 83C 32A	2907625	TMC 81D 32A	2907643	TMC 82D 32A	2907668	TMC 83D 32A	2907692
35	TMC 81B 35A	2907496	TMC 82B 35A	2907533	TMC 83B 35A	1010309	TMC 81C 35A	2907577	TMC 82C 35A	2907601	TMC 83C 35A	1010303	TMC 81D 35A	2907644	TMC 82D 35A	2907669	TMC 83D 35A	1010290
40	TMC 81B 40A	2907497	TMC 82B 40A	2907534	TMC 83B 40A	1010308	TMC 81C 40A	2907578	TMC 82C 40A	2907602	TMC 83C 40A	1010305	TMC 81D 40A	2907645	TMC 82D 40A	2907670	TMC 83D 40A	1010289
50	TMC 81B 50A	2907498	TMC 82B 50A	2907535	TMC 83B 50A	1010307	TMC 81C 50A	2907579	TMC 82C 50A	2907603	TMC 83C 50A	1010302	TMC 81D 50A	2907646	TMC 82D 50A	2907671	TMC 83D 50A	1010284
60	TMC 81B 60A	2907500	TMC 82B 60A	2907536	TMC 83B 60A	1010306	TMC 81C 60A	2907580	TMC 82C 60A	2907604	TMC 83C 60A	1010301	TMC 81D 60A	2907647	TMC 82D 60A	2907672	TMC 83D 60A	1010288
63	TMC 81B 63A	2907501	TMC 82B 63A	2907537	TMC 83B 63A	1010286	TMC 81C 63A	2907581	TMC 82C 63A	2907605	TMC 83C 63A	1010291	TMC 81D 63A	2907649	TMC 82D 63A	2907673	TMC 83D 63A	1010287

## Product description breakdown



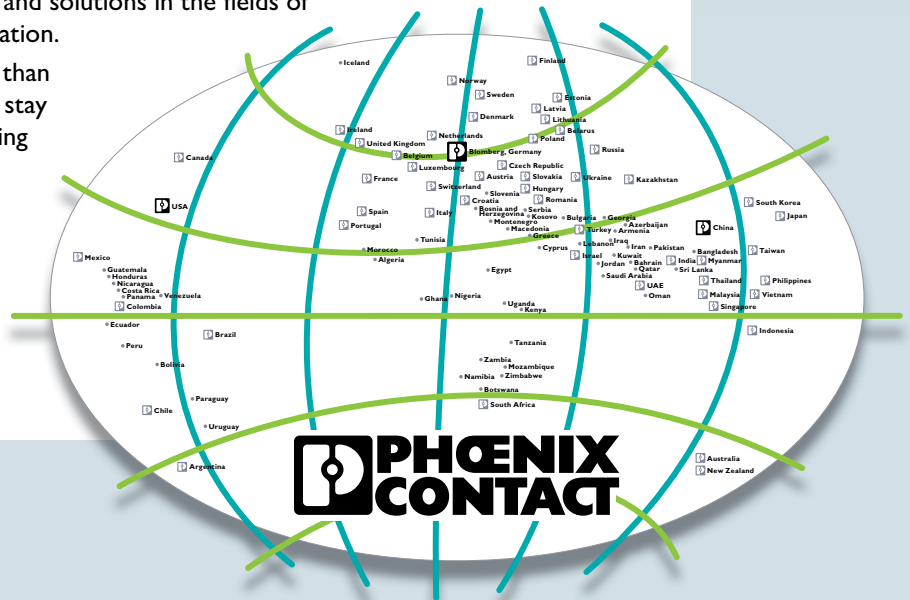
## Accessories

Part number	PN description	Description
2907991	TMC 8 B1 80 57 C	Single-pole, 57-position cuttable busbar
2907992	TMC 8 B1 80 37 CA	Single pole with accessory, 37-position cuttable busbar
2907993	TMC 8 B2 80 56 C	Double-pole, 56-position cuttable busbar
2907995	TMC 8 B2 80 46 CA	Double pole with accessory, 46-position cuttable busbar
2907996	TMC 8 B3 80 57 C	Three-pole, 57-position cuttable busbar
2907997	TMC 8 B3 80 48 CA	Three pole with accessory, 48-position cuttable busbar
2907998	TMC 8 B TERM PIN	Wiring termination
2907999	TMC 8 B END CAP	Insulating end cap for busbar after cutting to length
2908000	TMC 8 B BUS CAP	Touch-safe cap for busbar terminations
2908219	TMC 7/8 AUX	Contact for notification of breaker actuation
2908220	TMC 7/8 ALARM	Contact for indicating overcurrent trip
2908221	TMC 7/8 12VDC SHNT	12 V DC input for remote trip
2908222	TMC 7/8 24VDC SHNT	24 V DC input for remote trip
2908224	TMC 7/8 48VDC SHNT	48 V DC input for remote trip
2908225	TMC 7/8 125VDC SHNT	125 V DC input for remote trip
2908226	TMC 7/8 120VAC SHNT	120 V AC input for remote trip
2908227	TMC 7/8 240VAC SHNT	240 V AC input for remote trip
2908228	TMC 7/8 277VAC SHNT	277 V AC input for remote trip
2908227	TMC 7/8 240VAC SHNT	240 V AC input for remote trip
2908228	TMC 7/8 277VAC SHNT	277 V AC input for remote trip

# Ongoing communication with customers and partners worldwide

Phoenix Contact is a global, market leader based in Germany. Our group is known for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

With a global network reaching across more than 100 countries and 14,500 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for multiple applications and industries. We especially focus on the fields of energy, infrastructure, process, and factory automation.



You will find our complete product range at:  
[www.phoenixcontact.com](http://www.phoenixcontact.com)

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