TELE – Aligned With Your Requirements

The **TELE** group comprises several national companies in Germany, Austria and England along with a dense network of more than 40 trade partners around the world. When it comes to monitoring technology, we have put together a comprehensive, coordinated range of automation components for all your applications. This means that you can monitor and control the most diverse processes across different sectors. **TELE** products protect and enhance the availability and reliability of plant, buildings or machines thus giving you a value-add that will last.

TELE – Specialized In Your Needs

In our modern *TeleTechCenter* in Vienna, we manufacture your products to international standards for use worldwide. We supply you with cost saving automation products – based on over 40 years of experience, developed on the basis of the most up-to-date knowledge and produced to the highest quality standards.

TELE – Focused On Your Ideas

In addition, *TeleTech* offers comprehensive services for every facet of the process by which electronic modules are created. We accompany you every step of the way from the idea to implementation of your finished product. We offer you six different service modules to support this process: *Consultancy and development, logistics and procurement, production & manufacture, test equipment development & production, packaging and casing as well as testing & inspection.*

Certainly **TELE** is certified according to DIN ISO 9001:2000.

Austria
TELE Haase Ges.m.b.H.
Vorarlberger Allee 38
A-1230 Wien
Tel. +43 (0) 1 / 6 14 74 - 0
Fax. +43 (0) 1 / 6 14 74 - 100
info@tele-haase.at

Germany
TELE Steuergeräte GmbH
Joseph-Wild-Str. 16,
D-81829 München
Tel. +49 (0) 89 / 94 007 - 0
Fax. +49 (0) 89 / 94 007 - 100
info@tele-steuergeraete.de

Great Britain
Tele Control LTD.
Unit 21, Three Point Business Park
Haslingden
GB-BB4 5EH Lancashire
Tel. +44 (0) 1706 / 226 - 333
Fax. +44 (0) 1706 / 226 - 444
info@tele-control.co.uk

Art. Nr. 091035

Safety Relays S² Series

TELE POWER CONTROL

The ***TelePowerControl*** quality mark guarantees you constant innovation, state of the art technology and tested quality. ***TelePowerControl*** is based on the core elements of *Components, Solutions, Support and Training:*

Components:
Quick Select An efficient range of complementary products covering the areas of switching, monitoring, sensing and controlling.

Solutions:
Development of individual component solutions
- tailored to your application.

Support:
Competent and speedy support from the initial enquiry to prompt delivery right through to after sales support.

Training:
Application-specific seminars and information events for practical transfer of know-how.

tele Automation Components

WWWhere do you look for Automation Components? **www.tele-power-net.com**

tele Automation Components

SuperSafe:
Safety for man and machine

The safety relays in the new **S²** *range perform almost any safety application a modern safety design may call for. The consistent multifunctional and modular development of* **TELE** *safety relays means each individual device, individually and in combination, can be used for multiple applications.*

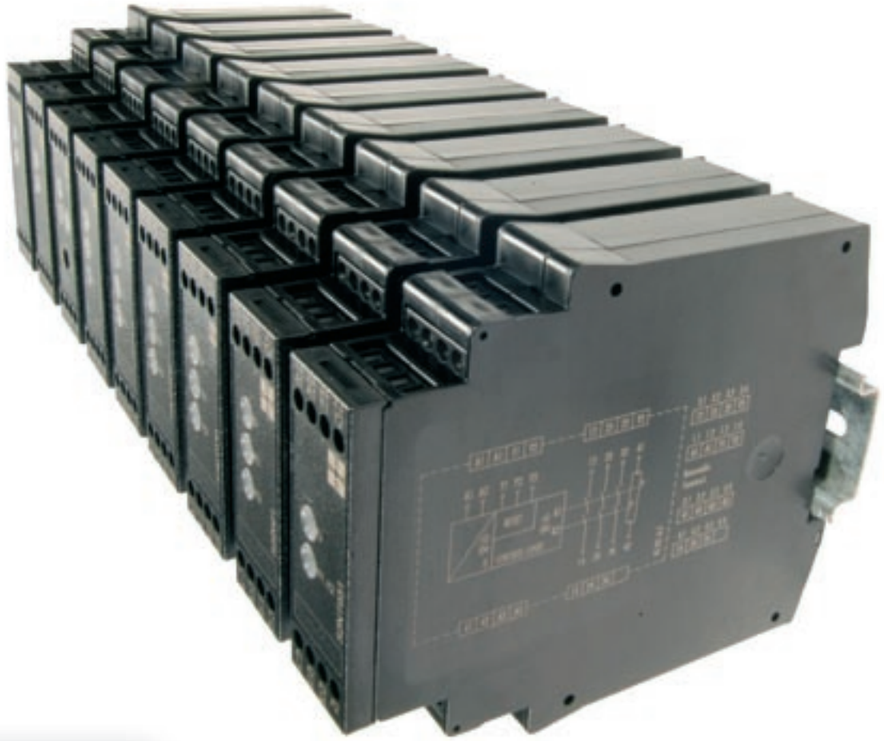
The extremely flexible safety inlets make it possible to use the most diverse sensors. Conventional guard switch contacts such as for example emergency stop switches can be analyzed in the same way as modern semi conductor outputs which provide light gates. Test signals from the associated sensor are neither influenced by this nor incorrectly interpreted thus ensuring error free operation.

Inside the extremely compact casing made from environmentally friendly plastics, a range of safety relays with a width of a mere 22.5 mm was developed to the highest technical standards which, combined with the small number of devices required, offers an optimal total solution – economically as well – for virtually all your control cabinet and engineering safety requirements.

The New Generation: Comprehensive, Flexible, Modular

The multifunctional concept means that each device in the new **S²** range is able to perform a multitude of tasks. For example, the S2NT030 is capable of analyzing not only equivalent safety signals from emergency stop control switches or protective wire grids but also antivalent signals e.g. from safety valves. Many devices are capable of operating the safety channels over either one or two channels depending on the degree of safety required by the guard. To ensure that a protective wire grid is closed sufficiently quickly, many devices are also capable of monitoring the simultaneity of contact actuation. To increase the safety level to safety category 4, all 2 channel devices possess cross circuit detection.

The S2NGS021 also uses this function to analyze cross circuit creating pressure sensitive mats without monitoring resistance. To reduce the sensitivity of the safety circuit to very rapid switching involving the connected safety signal emitters and thereby to prevent fluttering of the output relay, this device was fitted with input debouncing. This suppresses the bouncing of the pressure sensitive mat and thereby ensures error free operation.



Two-hand analysis is part of the extended functionality of TELE safety relays. The S2Z021 was specially developed to analyze signals from two-hand switches, commonly used on presses. This device as well is cleared for use up to safety level 4 and as such is always the correct solution when you need to plan or upgrade machinery two-hand relays to EN 574 Type III C standards.

If at any time the contacts of the **S²** basic device being used should prove inadequate for ensuring all the necessary enabling or feedback reports to and from the machine, as of now, TELE is offering contact expansion units. The S2K043 offers 4 additional enabling electrical circuits, 2 reporting electrical circuits and 1 feedback electrical circuit for safety locking of the basic device. If delayed contacts are to be added to a basic device without delay or if the number of delayed contacts is increased, this can be achieved using the S2KR403. It provides 4 delayed enabling and 3 delayed reporting or feedback circuits which decay after a preset period of 3 s when the security switch is actuated on the basic device.

The devices of the new **SuperSafe S²** *range are designed for use worldwide. It goes without saying that they have passed the requisite trade association tests and are cULus certified.*

>> Quick Select - *SuperSafe* Overview:

	Applications										Reset			Input circuit				Output Circuit			Supply Voltage			
	Maximum Achievable Safety-Category	Stop-Category	Emergency Stop	Safety Gate	Safety Mat	OSSD (light grill)	Monitoring of Valve-State	Two-Channel Activation	Contact Expansion Without Delay	Contact Expansion With Delay	Automatic Start	Start with Reset Monitoring	Start without Reset Monitoring	Synchronous Time Check Selectable	Cross Monitoring	Actuation via Semic. Output (OSSD) poss.	Input Debouncing	Delayed Enabling Current Path	Enabling current Path without Delay	Signalling current Paths	24VDC	24VAC	115-120V AC	230V AC
S2NG021	4	0	■	■		■					■	■	■	■	■	■		0	2	1	■	■		
S2NGS021	4	0	■	■	■	■					■	■	■		■	■	■	0	2	1	■	■		
S2NGR120	4/3	0/1	■	■		■					■	■	■	■	■	■		1	2	0	■			
S2NT030	4	0	■	■			■				■	■	■	■	■	■		0	3	0	■	■	o.R.	o.R.
S2NT031	2	0	■	■							■	■	■					0	3	1	■	■	o.R.	o.R.
S2LST030	4	0	■			■					■	■	■	■	■	■		0	3	0	■	■	o.R.	o.R.
S2Z021	4	0						■			■			■	■			0	2	1	■	■	o.R.	o.R.
S2K043	4	0							■									0	4	3	■	■		
S2KR403	4	1								■								4	0	3	■			

The Right Choice For Any Application - The Complete Overview of all TELE Monitoring Relays: