



solutions catalogue

SUPPLIER OF SOLUTIONS

THE BROADLINE DISTRIBUTOR OF ELECTRONIC COMPONENTS

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The company DIAMETRAL, established in 1991/ Czech Republic, specialises on the production of laboratory technique, laboratory tables, laboratory power supplies, micro-soldering stands, disjunctive transformers, panel foil keyboards and transport signalisation.

Společnost DIAMETRAL, založena v r. 1991 / Česká republika, se specializuje na výrobu laboratorní techniky, laboratorních stolů a napájecích zdrojů, mikropájecích, oddělovacích transformátorů, panelových membránových klávesnic a dopravní signalizace.

Das Unternehmen DIAMETRAL, gegründet 1991 / Tschechische Republik, spezialisiert sich auf die Herstellung von Labortechnik, Labortischen und -stromversorgungen, Mikro-Lötstationen, Sicherheitstransformatoren, Membrantastaturen für die Steuertafel und Verkehrssignalanlagen.

A DIAMETRAL 1991-ben alapították a Cseh Köztársaságban. Laboratóriumai felszerelések, laboratóriumiasztalok és tápegységek, mikro-forrasztó-állomások, leválasztó transzformátorok, membrán billentyűzetek és közlekedési jelzések gyártására szakosodott.

Spółka DIAMETRAL, założona w r. 1991 / Republika Czeska, specjalizuje się w produkcji techniki laboratoryjnej, laboratoryjnych stołów i źródeł zasilania, stacji mikrolutowniczych, transformatorów separacyjnych, panelowych klawiatur membranowych oraz sygnalizacji ruchu.

Societatea DIAMETRAL, înființată în 1991 / Republica Ceha specializată în producția de tehnică de laborator, mese de laborator, rețele electrice de laborator, suporturi pentru micro-sudură, transformatori disjunctivi, tastatură în folie pentru panouri și semnalizare de transport.

Spoločnosť DIAMETRAL, založená v r. 1991 / Česká Republika, sa špecializuje na výrobu laboratórnej techniky, laboratórných stolov a napájacích zdrojov, mikropájkových staníc, oddelovacích transformátorov, panelových membránových klávesníc a dopravnej signalizácie.

Advanced laboratory tables system VarioLab+ offers big variability. Thanks to this modular system of laboratory furniture the company is now able to offer to their customers a complete solution for establishing and furnishing of laboratories, technical classrooms and operational rooms.

Why DIAMETRAL?

- quality of EU made products
- high reliability – products designed for everyday use

DC Laboratory Power Supplies



P130R51D



P130R51D
L140R51D



P230R51D
L240R51D



V130R50D
V140R50D



Q130R50D



M130R50D

Technical Parameters	R124R50E	P130R51D	P230R51D	L140R51D	L240R51D	V130R50D	V140R50D	Q130R50D	M130R50D
Supply Voltage	230V/50Hz	230V/50Hz	230V/50Hz	230 V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz
Output Voltage	1x 0,9 ÷ 24V	1x 0 ÷ 30V	2x 0 ÷ 30V	1x 0 ÷ 40V	2x 0 ÷ 40V	1x 0 ÷ 30V	1x 0 ÷ 40V	1x 0 ÷ 30V	1x 0 ÷ 30V
Output Current	1x 0 ÷ 2A	1x 0 ÷ 4A	2x 0 ÷ 4A	1x 0 ÷ 3A	2x 0 ÷ 3A	1x 0 ÷ 10A	1x 0 ÷ 10A	1x 0 ÷ 20A	1x 0,2 ÷ 40A
Constant Voltage	-	1x 5V	1x 5V	1x 5V	1x 5V	-	-	-	-
Constant Current	-	1x 3A	1x 3A	1x 3A	1x 3A	-	-	-	-

AC Power Supplies, Isolation Transformers



AC250KxD Series



OT230.0xx Series



OT230 Series

Technical Parameters	OT230.012	OT230.021	OT230.030	OT230.050	OT230.100
Supply Voltage	230V/50Hz	230V/5 Hz	230V/50 Hz	230V/50 Hz	230V/50 Hz
Output Voltage	230V	230V	230V	230V	230V
Max. Output Current	1,2A	2,1A	3,0A	5,0A	10,0A

Autotransformers



RA1F250.031



RA1F250.200



RA1F250.100



RZ3F400.060

Technical Parameters	RA1F250.031	RA1F250.100	RA1F250.200
Supply Voltage	230V / 50Hz	230V / 50Hz	3x400V / 50Hz
Output Voltage	< 5 ÷ 230V	< 5 ÷ 230V	< 5 ÷ 450V
Output Current	3,1A	10A	6A

Laboratory Furniture



Superstructures with devices are made in various widths and single or double performance



Legible display of all values and devices control under 10° angle



VARIO LAB+

VarioLab+ Grows with You

Measuring, laboratory and working table VarioLab+ is intended for school classrooms, electro-technical workshops and research, production and repair workplaces. The modular design of tables makes it possible to equip it according to the user's specific requirements. Thanks to the interlocking structure of the supporting part, the individual tables can be combined into self-contained groups and each table can be completed with further shelves, holders, etc. Therefore it is possible to place the individual parts, including the working desk, at valuable height level according to the specific needs of each user by 1 mm and individual tables can be simply concatenated in continuous straight or corner working centres.

Supporting part of the table is made from metal square tubes with size 40 x 40 mm and height up to 2000 mm. Therefore is possible to place the individual parts, including the work desk, at valuable height according to the specific needs of each user. The surface of metal frame is made from baked-on coating Comaxit (available in different colours according to the customer's choice). The most recommended colours is grey RAL 7032. The working desk of the table is made from first-rate high-pressure laminate of 25 mm thickness with increased resistance against an abrasion and singe of the top layer. Desk's edges are made from plastic 4 x ABS of 2 mm thickness. Laboratory table working desk's dimensions are specified according to each particular set. Upon request, the working desk can be supplied with antistatic surface modification. The superstructure with instruments is made from laminate of 18 mm thickness with the same features as the main working desk of the table. Internal frame of the superstructure is made from metal square tubes. Instruments placed in the superstructure are inclined by an angle of 10% for easier legibility. The materials used are included in category E1 of formaldehyde evaporation and in category C2 as for the flammability parameter.

Instruments placed in the superstructure are arranged in a modular manner with following dimensions: width - 60 mm, height - 200 mm. Width of individual modules is available in multiples of basic width, i.e. 120 mm, 180 mm etc. Front panel of the modules is made from Fe plate of 2 mm thickness. Each module's surface is made from baked-on coating Comaxit



in grey colour RAL 7035.

Instrumental equipment of the superstructure is implemented according to specific requirements of each customer. Models of inbuilt instruments are in most cases modified from serial instruments manufactured by the company Diametral Ltd. Most of the modules are supplied with its own main switch and control light, but the individual modules can be used only if the superior module M08, whose utilities are circuit break, protector and main

switch TOTAL STOP, is switched off. Different customer-made modules can be manufactured according to the customer's requirements, but first is necessary to discuss the design and all particular technical specifications with manufacturer.

System VARIOLAB is dynamically growing day by day and still some new modules are enlarging the offer. For actual list of available modules please contact our office.



Modules for Superstructures

The Variolab+ devices are the main part of the integrated system Variolab+. Collection of electro-modules and pneumatic modules is optimally designed for establishment of a sophisticated working place according to the individual needs of each user.

Collection of modules contents various types of devices including the laboratory power supplies, counters, function generators, different types of outgoing circuits, measuring instruments, terminals, circuit breakers and last but not least, pneumatic modules.

All devices are manufactured in a modular system that can be easily combined or changed without any complication. The height of modules is 200 mm and the width of each module is made in a multiple of the base width 60 mm. Eventual change can be provided by unscrewing only 4 screws and unplugging the socket plug of the device from the mains inside the superstructure.

All active modules are equipped with their own switch-off. Furthermore, all these modules are controlled by the central module with a circuit breaker, protector and switch button TOTAL STOP. Thanks to this protection, the safety of the whole workplace is fully guaranteed. This central safety module contents also a switch for shut ON/OFF the light, if needed.

Different customer-made modules can be manufactured according to the customer's requirements. System VARIOLAB is dynamically growing day by day and still some new modules are enlarging the offer.



Selection from available Modules

Type	Description
M00	Cover 60 mm (M01 - 120 mm)
M02	Two Single Sockets 230V, 50 Hz, 6 A
M03	Connection Terminals
M04	DC Power Supply $\pm 15V/1A$
M05	DC Laboratory Adjustable Power Supply $1x0 \pm 30V/4A$; $5V/3A$
M06	Interface RS-232 (COM1 and COM2)
M07	Terminals $3x24V$ with 3F Circuit Breaker
M08	1-Phase Central Switch, Circuit Breaker, Protector, Switch Button TOTAL STOP
M09	AC Stabilized Power Supply $0 V - 255 V/1A$
M10	Counter and Function Generator
M11	Basic Measurement of DC Voltmeter and Ammeter
M12	Micro Soldering Stand
M13	DC Power Supply $9V / 1A$
M14	DC Double Laboratory Adjustable Power Supply $2x 0 \div 30V / 4 A$; $5 V / 3 A$
M15	Isolating Transformer $230 V / 230 V / 1,2A$
M16	DC Laboratory Adjustable Power Supply $1 x 0 \div 30 V / 10A$
M17	3-phase Pointer-type Ammeter $3 x 20A/40A$
M18	3-Phase Circuit Breaker and Protector
M19	Safety Terminals 3-Phase 400 V
M20	3-Phase Socket 16A + Switch Button ON/OFF
M21	Two Single Sockets 230V, 50 Hz, 6 A + own circuit breaker
M22	Cover 30 mm
M23	Short Circuit Tester
M24	Power Supply AC $24V/2A$ 1-Phase Socket + Control Light + Switch ON/OFF
M25	3-Phase Socket, Switch Button ON/OFF, Circuit Breaker $3 x 10A$, Control Lights
M26	Precise Multi-meter APPA 106
M27	Power Supply DC $\pm 15V/1A$; $+ 5V/3A$

Type	Description
M28	Interface RS-232, LPT, USB
M29	Isolating Transformer $230 V / 230 V / 2,1A$
M30	3-Phase Circuit Breaker
M31	Isolating Transformer $230 V / 230 V / 3A$
M32	3-Phase Central Switch, Circuit Breaker, Protector and Switch Button TOTAL STOP
M33	DC Laboratory Adjustable Power Supply $1 x 0 \div 30 V / 20A$
M34	Input Pointer-type UI AC Measuring Unit
M35	One Single Sockets $230V + 1 PC$ socket $230, 50 Hz, 6 A$
M36	Connection Terminals - 6 lines
M37	Module $3 x 400V$ with safety jacks, Circuit Breaker $10A$, Switch Button TOTAL STOP
M38	Interface RS-232, LPT, USB, LAN-RJ45
M39	Module with LAN switch $10/100 MB, 5 ports$
M40	Module with Replicator USB to 4 connection points
M41	DC Double Laboratory Adjustable Power Supply $2x 0 \div 40V / 3A$; $5V / 3A$
M42	DC Laboratory Adjustable Power Supply $1 x 0 \div 40V/3A$; $5V/3A$
M43	Stabilized Power Supply DC $\pm 24/1A$
M44	AC Stabilized Power Supply $0 V - 255 V/2A$
M45	Isolating Transformer $230 V / 230 V / 10A (M46 - 5A)$
M47	Non-Stabilized Unfiltered Power Supply DC $\pm 24/4,5A$
M48	DC Laboratory Adjustable Power Supply $1 x 0 \div 40V/10A$
M49	Pressured-Air Module with Precise Reduction Valve $2,5 bar (M50 - 10 bar)$
M51	Three-Phase Auto-Transformer $3x230 V / 400 V / 2A$
M52	Three-Phase Auto-Transformer $230 V / 2A$ with possibility of AC/DC change
M53	Non-Stabilized Unfiltered Power Supply DC $6 - 12 - 24 - 48V/2A$
M55	Two Single "Schuko" Sockets $230V, 50 Hz, 6 A + Own Circuit-breaker$

