MEGİSAN®

MEGİSAN ELEKTRİK SİSTEMLERİ SANAYİ ve TİCARET LİMİTED ŞİRKETİ SERVO REGÜLATÖR KULLANICI EL KİTABI

www.megisan.com.tr

INTRODUCTION

This document prepare for operate and set up accurately MEG 1S 1-2-3-5-7-10-15-20-25 ve MEG 3S 6-10-15-22-30-45-60-75-100-120 and MEG 3S 150 which machines produce by MEGISAN ELECTRICAL SYSTEMS.

This docement contain information about operating, maintenance,repair and using condition of Automatic Voltage Regulators. (AVR).

Before using machine, read this document carefully. If you can not understand or confused please contact our authorized staff.

STANDART FEATURE

Mechanical parts of machine consist of iron profile and iron sheets. For dust and humidity protection they painted with electrostatic paint.

Machine does not cause any vibration or noise and it's protection class is IP20.

Only if authorized personel can make machine's electrical connection to grid. If there is compensation banks and/or generators to see to Figure 1-1.

If user break any condition in this document producer (MEGISAN ELECTRICAL SYSTEMS) can not be responsible from any defects.

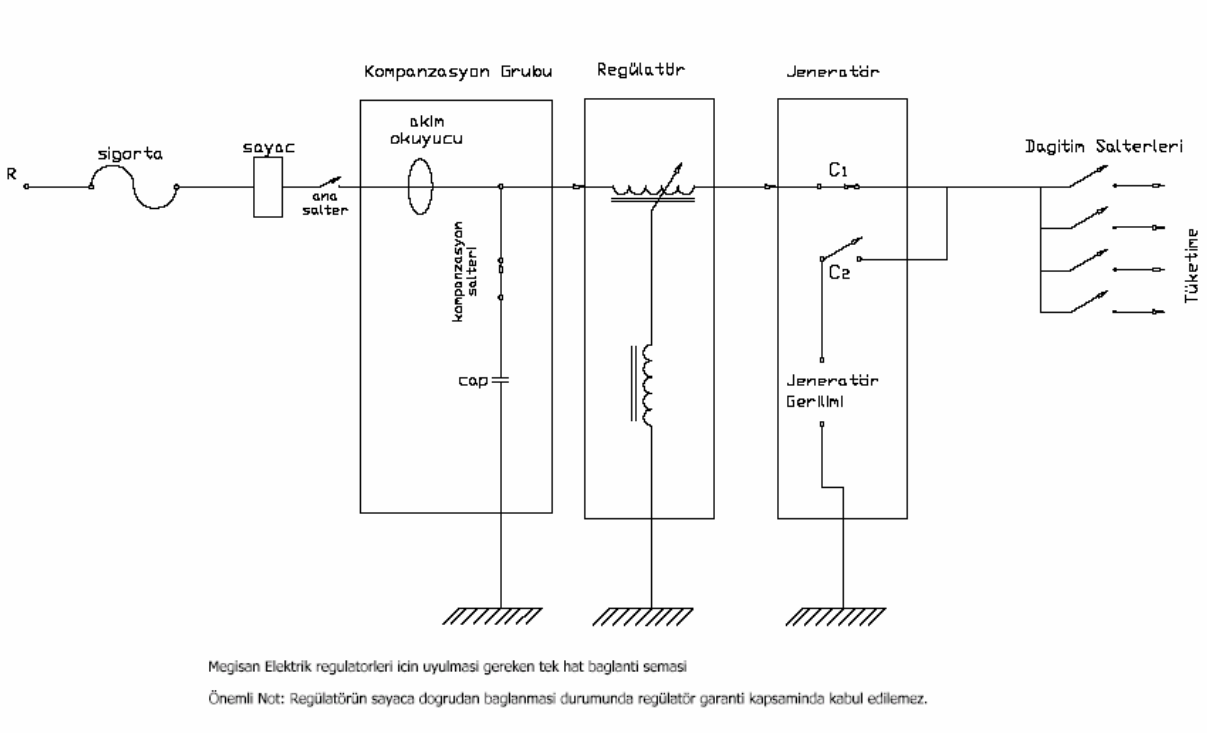


Figure 1-1

PROPER USAGE

Our devices product according to , Safety of Machinery Tst 10316 EN 60204-1 , LVD (73/23 AT) and Machinery Safety Direction (98/37 AT) .
However some hazardous situation may be occur the resutl of some defects or user faults.
This hazards,

- Depend on electric shock some injury.
- Some defects on the devices which connect to regulators output.

Be sure about your electrical load power. You should call us for power analysis otherwise our company will not be responsible of over load damages.
You must not connect any new electrical* load after Regulator start to operate.
*: Which load not consider in power analysis.

USAGE RESTRICTION

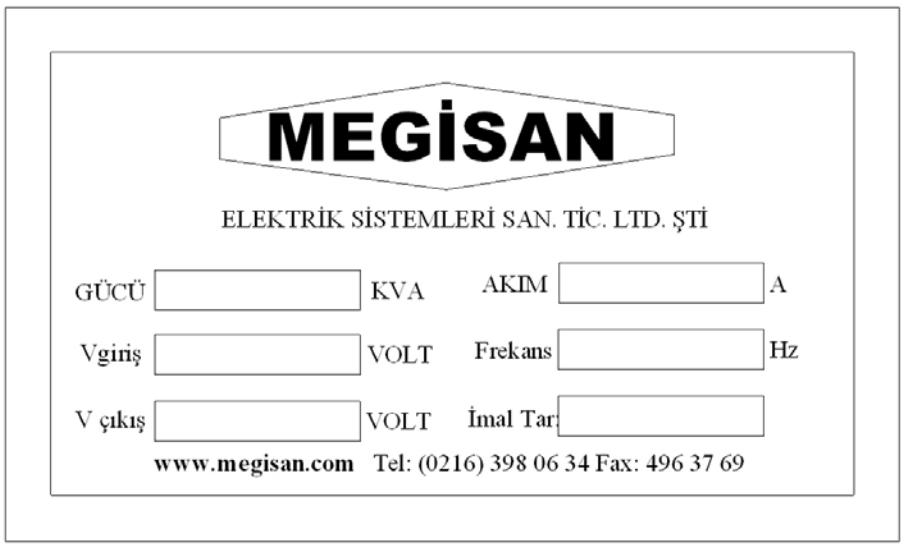
You can see machine's technical features (power, Rate Current , Control Bandwidth) on the label .
Before activate the device read this values.

SECURE OPERATE

- Be sure to input connection, neutral connection and make accurately.
- Be sure electrical loads separate balanced for each phase.
- After control the all connections , take the Change over switch to Line position.
- You can control the connection from the electrical scheme which prepare to IEC 61802 and should given you with Regulator.
- Read all informations on the labels.
- Do not put device extreme humid, dusty environment.
- The place where you put the device shouldn't be narrow otherwise technician can not work easily and air circulation can not be desirable level.
- Only if use orginal spare parts otherwise your guarantee will be invalid.

- For high efficiency do not use the regulator under full electric load.
- Only if authorised personels can open the regulator’s covers.
- During the maintenance or repair there should be a visible warning sign and input power must be cut down.
- If there is any problem with fuse, change the old fuse with equivalent new fuse.
- Do not put anythingon the power cord .
- You should CO2 extinguisher.
- If labels will be damage , change them with a new one.
- If you smell burn or see any smoke plug out the device.
- If voltage sags ratio high than 5% , regulator’s efficiency may be diminish.
- You can not this machine except regulating the voltage. If you use this machine another purpose Megisan Electrical Systems can not be responsible from any damages.

LABEL



EQUIPMENTS

1 – Booster Trafo

2 – Variac

3 – Motor

4 – Control Card (Pcb)

5 – Circuit Transformer

6 – Breaker (Changeover switch)

CONTROL OF THE MACHINE

CONTROL PANEL

MACHINE SET UP

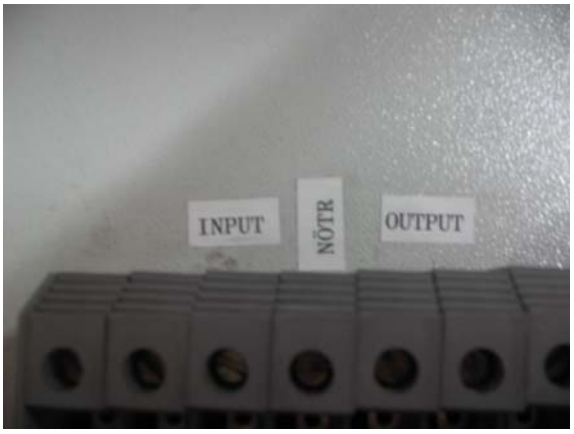
Cross Section, Breakers and Fuse's ;

MONOPHASE REGULATORS				
MODEL NO	**FUSE (Amper)**	**BREAKER (Amper)**	**CROSS SECTION (mm^2)**	
			INPUT CABLE	**OUTPUT CABLE**
Meg1S 5	25	25	4	4
Meg1S 7	32	32/40	6	6
Meg1S 10	40	40	6	6
Meg1S 15	50	63	10	10
Meg1S 20	63	100	16	16
Meg1S 25	80	100	25	25
Meg1S 30	120	160	35	35

POLY-PHASE REGULATORS				
MODEL NO	**FUSE (Ampere)**	**BREAKER (Ampere)**	**CROSS SECTION (mm^2)**	
			INPUT CABLE	**OUTPUT CABLE**
Meg3S 6	8/10	10	2,5	2,5
Meg3S 10	10	16	4	4
Meg3S 15	25	25	4	4
Meg3S 22	32	32/40	6	6
Meg3S 30	40	40	6	6
Meg3S 45	50	63	10	10
Meg3S 60	63	100	25	25
Meg3S 75	80	100	25	25
Meg3S 100	120	160	35	35
Meg3S 120	160	160/200	50	50
Meg3S 150	160	200	50/70	50/70

CONNECTION

Pic 1



Pic 2

ADJUSTMENT

NOT: You can adjust output voltage between 180 – 240 V.

TYPICAL APPLICATIONS

- Computers
- Test instruments
- Welding machines
- High voltage power supplies
- Heaters,coolers and air conditioners
- Power regulation in all buildings
- Lifts and escalators
- Deep well divers and various engine pomps
- Test and Research laboratories
- Illumination devices
- Refrigeration
- Modern industrial machines
- Textile industry machines
- Printing and publishing machines

MONOPHASE AVR DIMENSIONS				
MODEL	YÜKSEKLİK	EN	DERİNLİK	AĞIRLIK
	[mm]	[mm]	[mm]	[Kg]
MEG1S1	25	40	30	22
MEG1S2	25	40	30	29
MEG1S3	27	36	45	34
MEG1S5	27	36	45	43
MEG1S7	27	36	52	47
MEG1S10	27	36	52	56
MEG1S15	32	43	57	75
MEG1S20	85	65	55	120
MEG1S25	85	65	55	130

THREE PHASE AVR DIMENSIONS				
Model	Height	Width	Depth	Weight
[Kva]	[mm]	[mm]	[mm]	[Kg]
MEG3S6	98	42	46	110
MEG3S10	98	42	46	120
MEG3S15	98	42	46	140
MEG3S22	111	45	50	170
MEG3S30	111	45	50	210
MEG3S45	117	45	60	240
MEG3S60	133	59	87	380
MEG3S75	133	59	87	420
MEG3S100	150	71	87	550
MEG3S120	150	71	87	700
MEG3S150	150	71	87	800
MEG3S200	180	180	60	1000

PS: This dimensions and weigth values could change by Megisan Electrical System.

MAINTENANCE

Periodic inspection and preventive maintenance will warrant safety, proper function and prolonged life.

A complete inspection had already carried out by us before the first startup . The first preventive service check is due six months after energization of the equipment. Then maintenance service has to be carried out every 6 to 12 months. If the unit is operated in an aggressive atmosphere, more frequent checks are necessary.

GENERAL MAINTENANCE WORK

- Examine all contacts, connections and lines. Pay particular attention to the protective (ground) leads and their connections. Re-tighten screws, terminals, nuts etc
- Examine all moving parts and all mechanically working parts for proper function and fastening.
- Inspect the fastening and positioning of the limit switches.
- If required, clean and lubricate the elements of the driving gear assembly. Never lubricate carbon contact rollers or their axles.
- A manual check is sufficient. The rollers must rotate freely on the axles.
- If required, clean winding surfaces with a soft cloth.
- Never use emery paper (it would affect contacting and cause consequent damage).

3.3- TABLE OF GENERAL MAINTENANCE

DATE	NAME	OPERATION	SIGNATURE	