Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70 **Казахстан** +7(7172)727-132 **Киргизия** +996(312)96-26-47

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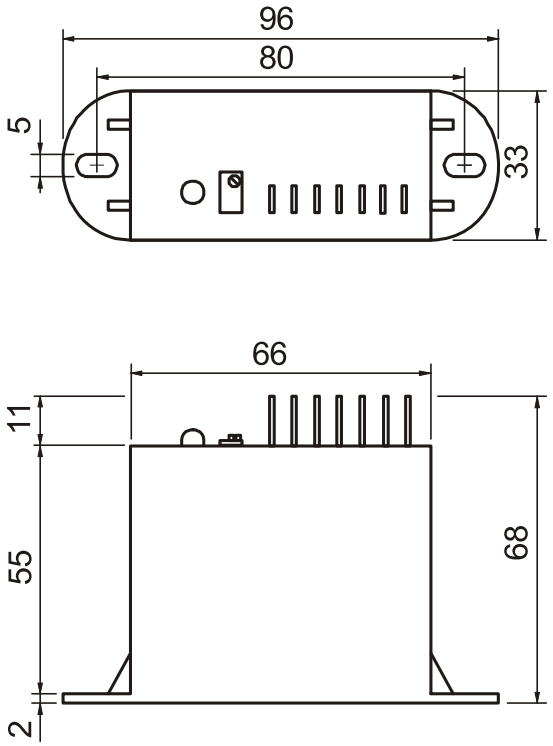
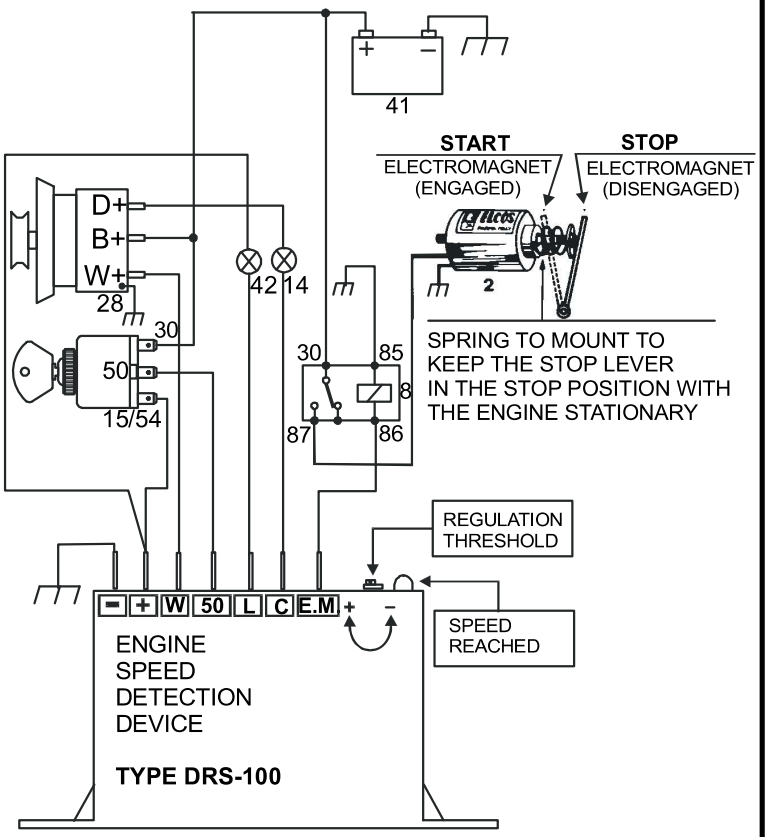
Технические характеристики на реле, датчики определения скорости дизельных двигателей и магнитные датчики MOS-100/00, DRV-100, DRS-100, TM90 компании ELCOS

ENGINE SPEED DETECTION DEVICE
TYPE DRS-100

INTSTRUCTION AND USER MANUAL



CONNECTION SCHEME



(1) Start key
(2) Electromagnet
(8) Servo-relay
(14) Charge check bulb (on engine)
(28) Charge alternator
(41) Battery
(42) Speed reached visual indication

FUNCTIONING

The device becomes active when the start key is inserted.
The servo-command engages at the same time as the start, allowing the normal functioning of the engine.
When the device detects, via the battery charge alternator, that the engine has exceeded the chosen speed, the servo-command disengages immediately, the engine stops and the visual signal lights up.
To reset return the start key to zero.

TECHNICAL CHARACTERISTICS

- Battery supply voltage	12VDC (MAX 16 VDC) or 24VDC (MAX 32 VDC)
- Maximum circuit loading	3 W
- Maximum charge on EM output	1 A
- Maximum power supplied to the L - C outputs	3 W
- Intervention frequency	300 ÷ 1000 Hz
- Temperature range	-10 ÷ +60°C
- Terminal board	Faston 6.35 × 0.8
- Degree of protection:	
- for the electronics	IP 65
- for the terminal board	IP 00
- Weight	200 g

ORDERING INFORMATION

Type DRS-100 12V	code 00020603
Type DRS-100 24V	code 00020604

ENGINE SPEED DETECTION DEVICE
TYPE DRS-100

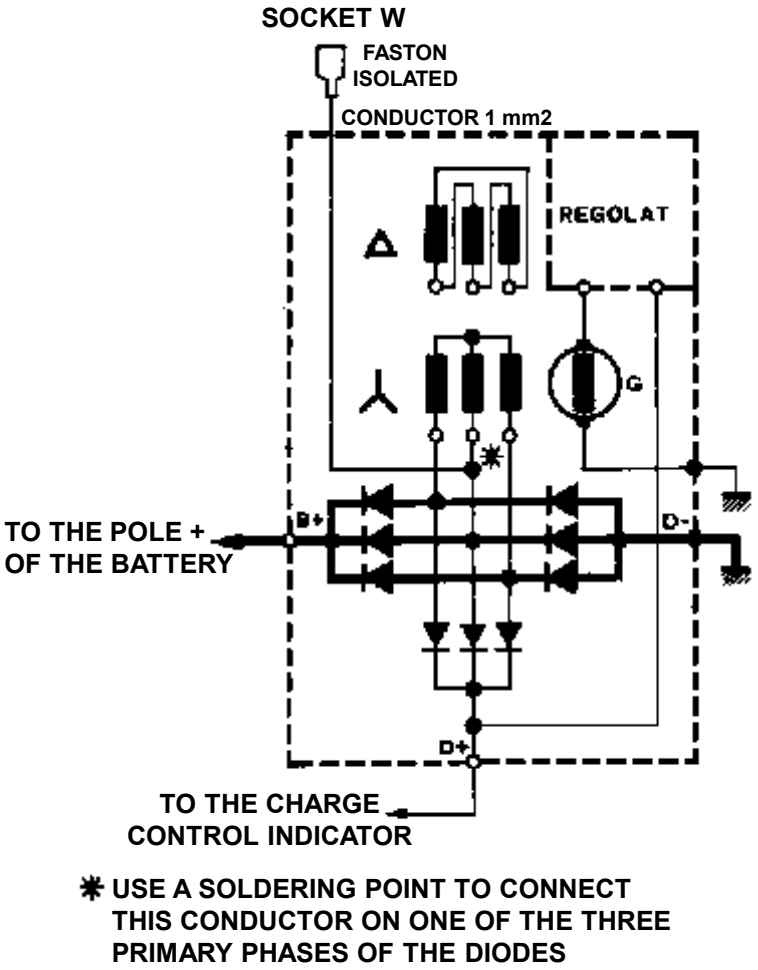
REGULATION

To calibrate the work threshold the below-listed operations must be performed in the order indicated:
- Connect all of the terminals of the device.
- Start the engine and bring it up the speed at which the device is to intervene.
- Turn the trimmer anti-clockwise, stopping when the visual signal lights up (because it has been calibrated at its maximum).
- The calibration trimmer has 20 revs and each turn corresponds to 600 ÷ 700 revolutions of the alternator.
- Return the start key to zero (reset).
- Repeat the start phase and, accelerating the engine, check that the device intervenes at the chosen threshold.

When the regulation oerations have been completed, secure the screw of the potentiometer with enamel.

HOW TO CONSTRUCT THE **W** SOCKET ON ANY BATTERY CHARGE ALTERNATOR

THREE-PHASE ALTERNATOR



✱ **USE A SOLDERING POINT TO CONNECT THIS CONDUCTOR ON ONE OF THE THREE PRIMARY PHASES OF THE DIODES**

N.B:
The W socket can only be used if the alternator is connected to its regulator.

ENGINE SPEED DETECTION DEVICE
TYPE DRS-100

Used only to detect the reaching of a speed threshold of a diesel engine.
Designed to be installed also on the machine.

NOTICES

Warning:
adhere closely to the following advice

- Always follow the Connection Scheme on page 1 when making connections.
- Check that the line loading and the consumption of the connected equipment are compatible with the technical characteristics on page 1.
- All technical interventions must be performed with the engine stationary and terminal 50 of the starter motor disconnected.
- Never use a battery charger for the emergency start-up, this could damage the equipment.
- Never disconnect the terminals of the battery with engine running.
- To protect the safety of persons and the equipment, before connecting an external battery charger, disconnect the electrical plant terminals from the battery poles.

THIS DEVICE IS NOT SUITABLE FOR OPERATING IN THE FOLLOWING CONDITIONS:

- Where the ambient temperature exceeds the limits specified in the technical characteristics on page 1.
- Where there are high levels or heat from radiation caused by the sun, ovens or the like.
- Where there is the risk of fire or explosions.
- Where the device can receive strong vibrations or knocks.

ELECTROMAGNETIC COMPATIBILITY

This device functions correctly only if inserted in plants which conform with the CE marking standards; it meets the exemption requirements of the standard EN50082-2 but it cannot be excluded that malfunctions could occur in extreme cases due to particular situations.
The installer has the task of checking that the disturbance levels are within the requirements of the standards.

CONDUCTION AND MAINTENANCE

The following maintenance operations should be performed every week:

- check that the indicators function;
- check the batteries;
- check that the conductors are tight, check the condition of the terminals.

UNLESS WE MAKE A WRITTEN DECLARATION STATING THE CONTRARY, THIS DEVICE IS NOT SUITABLE FOR USE AS A CRITICAL COMPONENT IN EQUIPMENT OR PLANTS RESPONSIBLE FOR KEEPING PERSONS OR OTHER LIVING BEINGS ALIVE

YOUR ELECTRICAL TECHNICIAN CAN ASK US ANYTHING ABOUT
THIS DEVICE BY TELEPHONING ONE OF OUR TECHNICIANS

CONFORMITY DECLARATION

CE

The company Elcos s.r.l. assumes full responsibility for declaring that the equipment:

type **DRS-100**

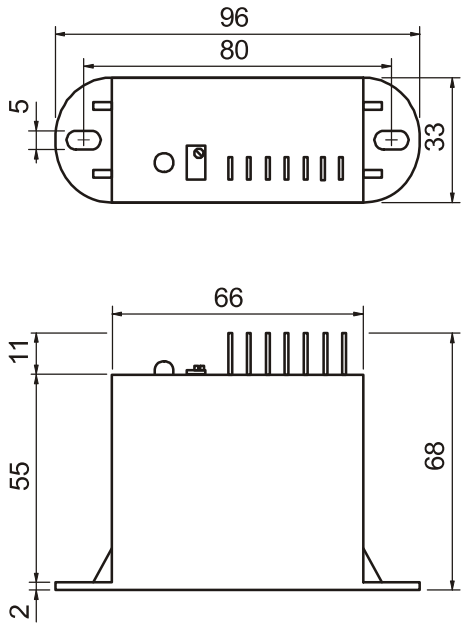
installed and used in the ways and for the purposes described in the instruction and user manual, is in conformity with the directive:

- 2004/108/CE related to the electromagnetic compatibility and that repeals the directive 89/336/CEE,

because it is built and functions in accordance with the harmonized Standards:
EN61326-1, EN61326/A1, EN61000-4-2, EN61000-4-4, EN61000-4-6, EN60529.

ENGINE SPEED DETECTION DEVICE
TYPE DRV-100

INTSTRUCTION AND USER MANUAL



FUNCTIONING:

The device makes it possible to establish or to interrupt an electric circuit when a set engine rotation speed is reached.
It becomes immediately active when the start key is inserted, commutating the contact to be used.
When, via the magnetic transducer (pick-up Type TM90/..), it detects that the engine has reached the chosen speed, the contact returns to the rest position and the visual signal located on the device lights up.
The situation can remain memorized (scheme A) until manual resetting, which is obtained by turning the start key to zero, or non memorized until the engine speed falls below the preset value (scheme B).

TECHNICAL CHARACTERISTICS:

Battery supply voltage (MAX16VDC)	12VDC
	or 24 VDC (MAX 32 VDC)
-Maximum circuit loading:	3W
-Maximum charge on commutating contact:	1 A 30 VDC
-Intervention frequency:	1000 ÷ 9000 Hz
-Temperature range:	-10 ÷ +60°C
-Terminal board:	Faston 6.35 x 0.8
Degree of protection:	
- for the electronics	IP 65
- for the terminal board	IP 00
-Weight:	200 g

CALCULATION OF INPUT FREQUENCY

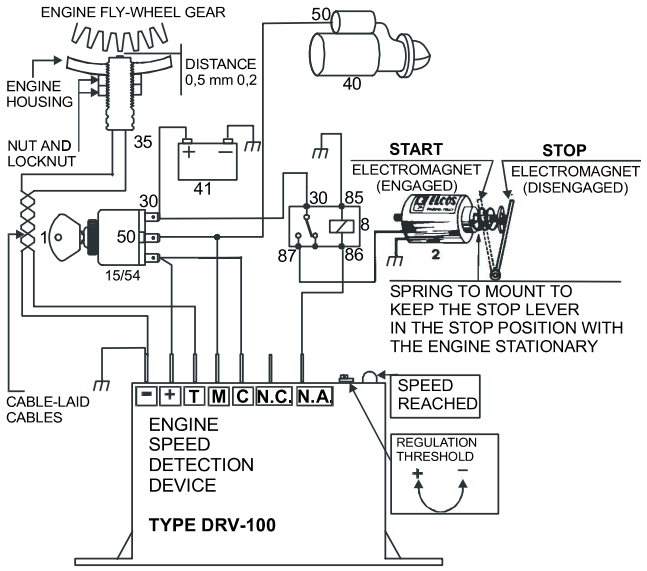
The frequency that the device detects is the number of gear teeth that pass in front of the magnetic transducer in one second, therefore:

$$\frac{\text{n° g/m engine} \times \text{n° gear teeth}}{60 \text{ seconds}}$$

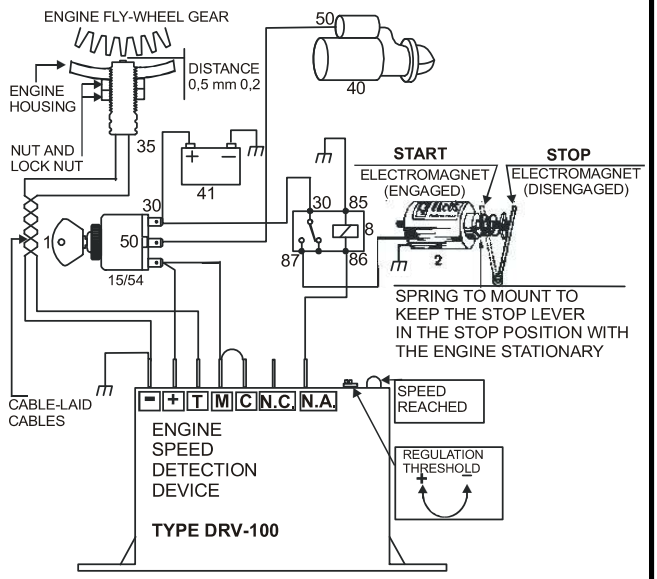
Input frequency signal =

CONNECTION SCHEMES

A) SPEED DETECTION MEMORIZED



B) SPEED DETECTION NOT MEMORIZED



(1) Start key
(2) Electromagnet
(8) Servo-relay
(35) Magnetic transducer
(pick-up type TM90-M16, TM90-M18, TM90-5/8,TM90-3/4)
(40) Start motor
(41) Battery

ORDERING INFORMATION

TYPE DRV-100 12V	Code 00020605
TYPE DRV-100 24V	Code 00020606

ENGINE SPEED DETECTION DEVICE
TYPE DRV-100

REGULATION

To calibrate the work threshold the below-listed operations must be performed:

- Connect all of the terminals of the device (terminal M to 15/54 of the start key, engine plant supply).
- Start the engine and bring it up to the speed at which the device is to intervene.
- Turn the multi-turn potentiometer (20 revs MAX) anti-clockwise, because it has been calibrated at its maximum.
- Stop when the visual signal lights up.
- Accelerate and decelerate the engine to check that the device intervenes at the chosen threshold.
- Finally, if the intervention is to be memorized, i.e. remain until manual resetting, connect terminal M, not to 15/54, but to 50 of the start key (inserting of the start engine).

When the regulation oerations have been completed, secure the screw of the potentiometer with enamel.

NOTE

If the connection between the device and the magnetic transducer is interrupted, the visual signal lights up and the output contact returns to the rest position.

ENGINE SPEED DETECTION DEVICE
TYPE DRV-100

Used only to detect the reaching of a speed threshold of a diesel engine.
Designed to be installed also on the machine.

NOTICES

Warning:
adhere closely to the following advice

- Always follow the Connection Schemes on page 1 when making connections.
- Check that the line loading and the consumption of the connected equipment are compatible with the technical characteristics on page 1.
- All technical interventions must be performed with the engine stationary and terminal 50 of the starter motor disconnected.
- Never use a battery charger for the emergency start-up, this could damage the equipment.
- Never disconnect the terminals of the battery with engine running.
- To protect the safety of persons and the equipment, before connecting an external battery charger, disconnect the electrical plant terminals from the battery poles.

THIS DEVICE IS NOT SUITABLE FOR OPERATING IN THE FOLLOWING CONDITIONS:

- Where the ambient temperature exceeds the limits specified in the technical characteristics on page 1.
- Where there are high levels or heat from radiation caused by the sun, ovens or the like.
- Where there is the risk of fire or explosions.
- Where the device can receive strong vibrations or knocks.

ELECTROMAGNETIC COMPATIBILITY:

This device functions correctly only if inserted in plants which conform with the CE marking standards; it meets the exemption requirements of the standard EN50082-2 but it cannot be excluded that malfunctions could occur in extreme cases due to particular situations.
The installer has the task of checking that the disturbance levels are within the requirements of the standards.

CONDUCTION AND MAINTENANCE

The following maintenance operations should be performed every week:

- check that the indicators function;
- check the batteries;
- check that the conductors are tight, check the condition of the terminals.

UNLESS WE MAKE A WRITTEN DECLARATION STATING THE CONTRARY, THIS DEVICE IS NOT SUITABLE FOR USE AS A CRITICAL COMPONENT IN EQUIPMENT OR PLANTS RESPONSIBLE FOR KEEPING PERSONS OR OTHER LIVING BEINGS ALIVE

YOUR ELECTRICAL TECHNICIAN CAN ASK US ANYTHING ABOUT
THIS DEVICE BY TELEPHONING ONE OF OUR TECHNICIANS

CONFORMITY DECLARATION

CE

The company Elcos s.r.l. assumes full responsibility for declaring that the equipment:

type **DRV-100**

installed and used in the ways and for the purposes described in the instruction and user manual, is in conformity with the directive:

- 2004/108/CE related to the electromagnetic compatibility and that repeals the directive 89/336/CEE,
- 2011/65/UE on the restriction of the use of certain hazardous substances in electrical and electronic equipment,

because it is built and functions in accordance with the harmonized Standards:
EN61326-1, EN61326/A1, EN61000-4-2, EN61000-4-4, EN61000-4-6, EN60529.

ENGINE RUNNING DETECTION DEVICE AND SIGNAL FOR SPEED INDICATOR

TYPE **MOS-100/00**

- This detects when a diesel engine reaches a speed threshold
- It simulates the terminal W and D+ or a battery recharge alternator

FUNCTIONING

The device uses a magnetic transducer (pick-up type TM-90/…)
To detect he speed of an engine which has two thresholds inside; one that can be adjusted by the user, which is the "ENGINE RUNNING" threshold, and the other which is fixed at a very low number of revolutions, and which represents the stationary engine threshold. At the moment when the device is supplied, the output D+ is negative (-).
When the device detects that the engine is running, the output D+ moves from negative to positive (+).
Independently, a second output W supplies a frequency that is similar to that found on the W terminal of a pre-excitation battery charge alternator (normally used as a revs counter).
When detection has occurred, a green indicator located on the device lights up.
The situation remains like this up until 4 seconds after the speed has fallen below the "STATIONARY ENGINE" fixed threshold, in other words only when the engine is clearly stationary.

ENGINE RUNNING DETECTION DEVICE AND SIGNAL FOR SPEED INDICATOR TYPE MOS-100/00

This detects when a diesel engine reaches a speed threshold.
It has been designed so that it can also be installed on the machine.

NOTICES

Warning:
adhere closely to the following advice

- Always follow the circuit diagram when making connections.
- Check that the line loading and the consumption of the connected equipment are compatible with the enclosed technical characteristics.
- All technical interventions must be performed with the engine stationary and terminal 50 of the starter motor disconnected.
- Never use a battery charger for the emergency start-up, this could damage the equipment.
- To protect the safety of persons and the equipment, before connecting an external battery charger, disconnect the electrical plant terminals from the battery poles.

THIS DEVICE IS NOT SUITABLE FOR OPERATING IN THE FOLLOWING CONDITIONS:

- Where the environmental temperature is outside the limits indicated in the enclosed technical sheet.
- Where there are high levels or heat from radiation caused by the sun, ovens or the like.
- Where there is the risk of fire or explosions.
- Where the device can receive strong vibrations or knocks.

ELECTROMAGNETIC COMPATIBILITY

This device functions correctly only if inserted in plants which conform with the CE marking standards; it meets the exemption requirements of the standard EN50082-2 but it cannot be excluded that malfunctions could occur in extreme cases due to particular situations.
The installer has the task of checking that the disturbance levels are within the requirements of the standards.

CONDUCTION AND MAINTENANCE

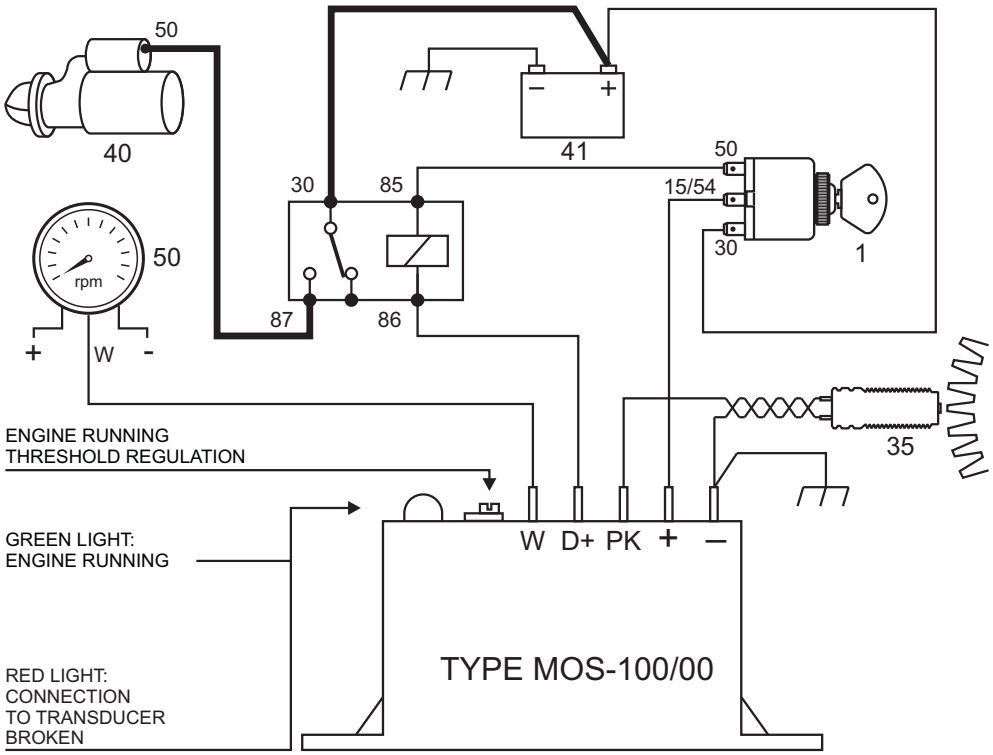
The following maintenance operations should be performed every week:

- check that the indicators function;
- check the batteries;
- check that the conductors are tight, check the condition of the terminals.

UNLESS WE MAKE A WRITTEN DECLARATION STATING THE CONTRARY, THIS PANEL IS NOT SUITABLE FOR USE AS A CRITICAL COMPONENT IN EQUIPMENT OR PLANTS RESPONSIBLE FOR KEEPING PERSONS OR OTHER LIVING BEINGS ALIVE

YOUR ELECTRICAL TECHNICIAN CAN ASK US ANYTHING ABOUT THIS DETECTION DEVICE BY TELEPHONING ONE OF OUR TECHNICIANS

CIRCUIT DIAGRAM



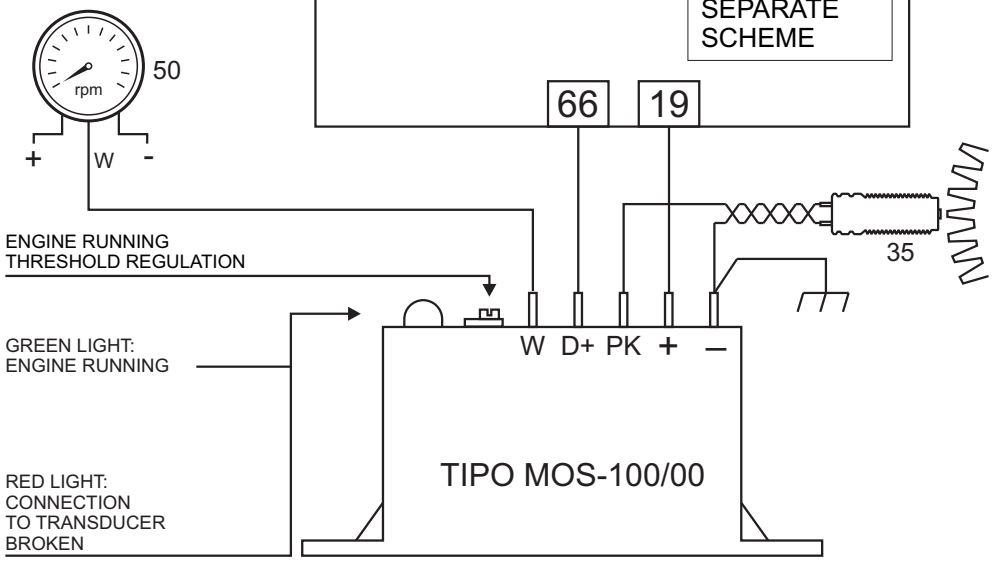
When the engine running threshold is reached, the starter motor is disengaged via a power relay and the revs counter is supplied with the frequency

(1) Ignition key
(35) Magnetic transducer
(40) Starter motor
(41) Battery
(50) Revs counter

JUNCTION BOXES TYPE:

-DCA-109

FOR OTHER APPLICATIONS ASK FOR A SEPARATE SCHEME



When the engine running threshold is reached, the starter motor disengages via a junction box or automatic starter device and the revs counter is supplied with the frequency.

REGULATION

To set the point at which the engine is considered to have started, the below listed operations must be performed in order:

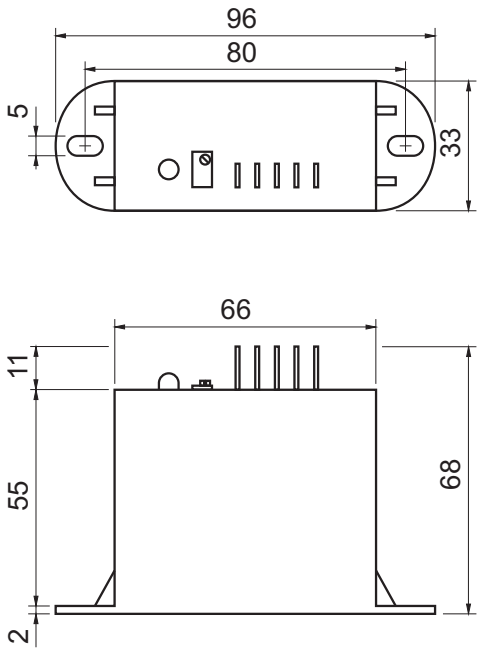
- Start the engine and bring it up to the minimum possible speed.
- Rotate the multi-revs (20 revs) potentiometer anti-clockwise since it has been set at its maximum.
- Stop the moment that the indicator lights up.
- Finally, try to perform a few engine start-ups to check that the desired function has been achieved.

When regulation operations have been terminated, the screw of the potentiometer should be secured with enamel.

NOTE

If the connection between the magnetic transducer and the device is broken, the green indicator light becomes red. The output D+ remains (+) and there is no frequency at output W.

DIMENSIONS



TECHNICAL DATA

- BATTERY SUPPLY VOLTAGE	12 and 24 VDC
- SUPPLY VOLTAGE	8 ÷ 32 VDC
- MAXIMUM CIRCUIT LOADING	15mA
- MAXIMUM LOAD ON OUTPUT (D+)	3 W
- OUTPUT W FREQUENCY	100 ÷ 1800 Hz
- THRESHOLD REGULATION	600÷ 3500 Hz
- TEMPERATURE RANGE	-10 ÷ +60 °C
- TERMINAL BOARD	FASTON 6.35 × 0.8
- DEGREE OF PROTECTION - FOR THE ELECTRONICS - FOR THE TERMINAL BOARD	 IP 65 IP 00
- WEIGHT	190 g

DATA FOR ORDERING

TYPE MOS-100/00 code 00020631

$$\text{Frequency of input signal} = \frac{\text{Rpm x n° gear teeth}}{60}$$

CONFORMITY DECLARATION

CE

The company Elcos s.r.l. assumes full responsibility for declaring that the equipment: :

type: **MOS-100/00**

installed and used in the ways and for the purposes described in the instruction and user manual, is in conformity with the directive:

- 2004/108/CE related to the electromagnetic compatibility and that repeals the directive 89/336/CEE,

because it is built and functions in accordance with the harmonized Standards:
EN61326-1, EN61326/A1, EN61000-4-2, EN61000-4-4, EN61000-4-6, EN60529.

TRASDUTTORI MAGNETICI
MAGNETIC TRANSDUCERS
TRANSDUCTORES MAGNÉTICOS
TRANSDUCTEURS MAGNETIQUES
MAGNET WANDLER
TRANSDUTORES MAGNÉTICOS

PICK-UP

FUNZIONAMENTO

Eroga un segnale di tensione a frequenza proporzionale alla velocità della corona dentata. Funziona a variazione di riluttanza con segnale d'uscita a forma sinusoidale.

FUNCTIONING

It supplies a voltage with frequency proportional to the gear speed. It works using magnetic reluctance with a sinusoidal output signal.

FUNCIONAMIENTO

Emite una señal de tensión de frecuencia proporcional a la velocidad de la corona estriada. Funciona a variación de reluctancia con señal de salida en forma sinusoidal.

FONCTIONNEMENT

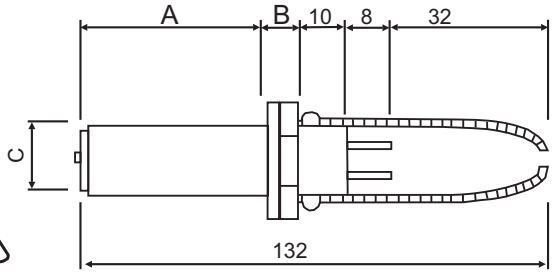
Il émet un signal de tension à une fréquence proportionelle à la vitesse de la couronne. Il fonctionne à une variation de réluctance avec un signal de sortie en forme sinusoîdal.

BETRIEBSWEISE

Gibt ein Spannungssignal mit einer zur Kranzgeschwindigkeit proportionalen Frequenz ab. Funktioniert mit Reluktanzveränderung mit sinusförmigen Ausgangssignal.

FUNCIONAMENTO

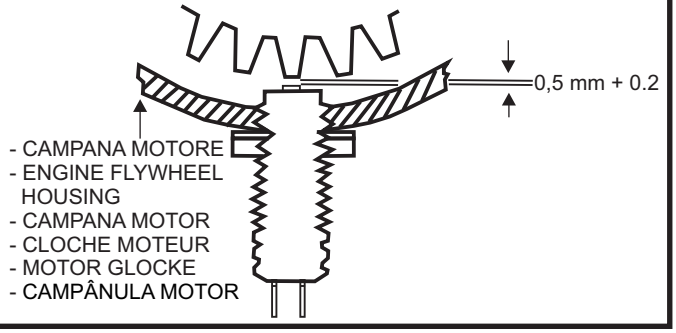
Emite um sinal de tensão a uma frequência proporcional à velocidade da coroa dentada. Funciona por meio da variação de relutância com sinal de saída em forma sinusoidal.



TYPE	A	B	⌀	C Thread	C Ø	Coppia di serraggio Driving torque Pareja par de torsion Couple de serrage Das Paar die Verschraubung
TM90 – M16	68	8	24	M16X1,5	15,8	25Nm
TM90 – M18	66	9	27	M18X1,5	17,8	
TM90 – 5/8	67	8	24	5/8"W 18 – UNF	15,8	
TM90 – 3/4	66	9	28	3/4" W 16 – UNF	19,0	

MONTAGGIO DEL TRASDUTTORE MAGNETICO
ASSEMBLING THE MAGNETIC TRANSDUCER
MONTAJE DEL TRANSDUCTOR MAGNÉTICO
MONTAGE DU TRANSDUCTEUR MAGNETIQUE
MONTAGE DES MAGNET-WANDLER
MONTAGEM DO TRANSDUTOR MAGNÉTICO

- CORONA VOLANO MOTORE
- GEAR OF THE ENGINE FLYWHEEL
- CORONA VOLANTE MOTOR
- COURONNE VOLANT MOTEUR
- SCHWUNGRADKRANZ MOTOR
- COROA VOLANTE MOTOR



Verificare che la corona dentata del volano motore non abbia bavature e/o eccessiva sporcizia. Scegliere una posizione in cui possa essere fatto un foro, in modo che i denti della corona passino di fronte al trasduttore. Eseguire il foro. Ruotare la corona fino a che il piano di un dente si trovi al centro del foro. Avvitare il trasduttore fino a farlo toccare delicatamente il dente, quindi svitarlo circa di 1/3 di giro, per portarlo alla distanza di lavoro. Serrare dado il dado.

Check that the gear of the engine flywheel is not burred or dirty. Find a position where a hole can be drilled, so that the cogs of the gear pass in front of the transducer. Drill a hole and tap. Turn the gear till the flat of a cog is centred on the hole. Screw in the transducer till it touches the cog slightly, then loosen it off by about one third of a turn, to bring it to the working distance. Tighten the nut.

Controle que la corona estriada del volante del motor no tenga babas y/o excesiva suciedad. Elija una posición en la que pueda hacer un agujero para que las estrias de la corona pasen enfrente del transductor. Haga el agujero y rosque. Gire la corona hasta que el plano de un diente se encuentre en el centro del agujero. Enrosque el transductor hasta hacerlo tocar suavemente el diente, luego desenrósquelo cerca de 1/3 de vuelta para ponerlo a la distancia de trabajo.
Apriete la tuerca.

Vérifiez si la couronne dentée du volant n'a pas de bavures ou trop de saleté. Choisissez une position dans laquelle on peut percer un trou de sort que les dents de la couronne passent en face du transducteur. Percez le trou puis filetez-le de. Tournez la couronne jusqu'à ce que la face d'une dent se trouve au milieu du trou. Vissez le transducteur jusqu'à ce qu'il touche délicatement la dent. Dévissez-le ensuite environ de1/3 de tour pour l'amener à la distance de travail.
Vissez l'écrou.

Sicherstellen, daß der Zahnkranz des Motorschwungrads keine Grate und/oder starke Schmutzablagerungen aufweist. Eine Position bestimmen, in der eine Bohrung realisiert werden kann, damit die Zähne des Kranzes vor dem Wandler vorbeilaufen können. Die Bohrung und ein Gewinde schneiden. Den Kranz drehen, bis die Fläche eines Zahnes sich in der Mitte der Bohrung befindet. Den Wandler festschrauben, bis er den Zahn leicht berührt, und ihn dannum ungefähr 1/3 Drehung lockern, um ihn in die Betriebsposition zu bringen. Mutter und Gegenmutter festziehen.

Verifique se a coroa dentada do volante motor não apresenta rebarbas e/ou excessiva sujidade. Escolha uma posição para fazer um furo de maneira que os dentes da coroa passem na frente do transdutor. Faça um furo e rosqueie. Rode a coroa até a face de um dente ficar no centro do furo. Aparafuse o transdutor até tocar delicadamente no dente, então desaparafuse-o cerca de 1/3 de volta para colocá-lo à distância de trabalho. Aperte a porca.

CARATTERISTICHE TECNICHE	
- Tensione d'uscita (a 1 Khz e traferro = 0,5 mm, carico = 10 Kohm)	5.2 V eff. + 20%
- Tensione d'uscita (a 1Khz e traferro = 2.5 mm, carico = 10 Kohm)	0,5 V eff. + 20%
- Impedenza minima di carico	10 Kohm + 20%
- Corrente massima momentanea (per 1 sec. A 50 Hz)	100 mA eff. + 20%
- Resistenza dell'avvolgimento	400 ohm + 20%
- Campo di frequenza	100 Hz : 15 Khz
- Limiti di temperatura	-30 +90°C
- Corpo	ottone zincato
- Morsettiera	Faston 6.35 X 0.8
- Grado di protezione	inglobamento con resina

TECHNICAL DATA	
- Output voltage (at 1 Khz and 0,5 mm gap, load = 10 Kohm)	5.2 V eff. + 20%
- Output voltage (at 1Khz and 2.5 mm gap, load = 10 Kohm)	0,5 V eff. + 20%
- Minimum load impedance	10 Kohm + 20%
- Maximum instantaneous current (for 1 sec. At 50 Hz)	100 mA eff. + 20%
- Winding resistance	400 ohm + 20%
- Frequency range	100 Hz : 15 Khz
- Temperature range	-30 +90°C
- Body	zinc plated brass
- Terminal block	Faston 6.35 X 0.8
- Protection	enbedded in resin

DATOS TECNICOS	
- Tensión de salida (a 1 Khz y entrehierro = 0,5 mm, carga = 10 Kohm)	5.2 V eff. + 20%
- Tensión de salida (a 1Khz y entrehierro = 2.5 mm, carga = 10 Kohm)	0,5 V eff. + 20%
- Impedancia mínima de carga	10 Kohm + 20%
- Corriente máxima momentánea (por seg. A 50 Hz)	100 mA eff. + 20%
- Resistencia del bobinado	400 ohm + 20%
- Campo de frecuencia	100 Hz : 15 Khz
- Límites de temperatura	-30 +90°C
- Cuerpo	latón galvanizado
- Caja de bornes	Faston 6.35 X 0.8
- Grado de protección	englobamiento con resina

DONNEES TECHNIQUES	
- Tension de sortie (à 1 Khz et entrefer = 0,5 mm, charge = 10 Kohm)	5.2 V eff. + 20%
- Tension de sortie (à 1Khz et entrefer = 2.5 mm, charge = 10 Kohm)	0,5 V eff. + 20%
- Impédance minimum de charge	10 Kohm + 20%
- Courant maximum momentané (pendant 1 sec. à 50 Hz)	100 mA eff. + 20%
- Résistance de la bobine	400 ohm + 20%
- Champ de fréquence	100 Hz : 15 Khz
- Limites de température	-30 +90°C
- Corps	laiton zingué
- Bornier	Faston 6.35 X 0.8
- Indice de protection	amalgame avec résin

TECHNISCHE DATEN	
- Ausgangsspannung (bei 1 Khz und Luftspalt = 0,5 mm, Last = 10 Kohm)	5.2 V eff. + 20%
- Ausgangsspannung (bei 1Khz und Luftspalt = 2.5 mm, Last = 10 Kohm)	0,5 V eff. + 20%
- Mindestlastimpedanz	10 Kohm + 20%
- Kurzzeitiger Spitzenstrom (über 1 sec. bei 50 Hz)	100 mA eff. + 20%
- Widerstand der Wicklung	400 ohm + 20%
- Frequenzbereich	100 Hz : 15 Khz
- Temperaturgrenzen	-30 +90°C
- Körper	verzinktes Messing
- Klemmenbrett	Faston 6.35 X 0.8
- Schutzgrad	In Kunstharz eingegossen

DADOS TÉCNICOS	
- Tensão de saída (e 1 Khz e entreferro = 0,5 mm, carico = 10 Kohm)	5.2 V eff. + 20%
- Tensão de saída (e 1Khz e entreferro = 2.5 mm, carga = 10 Kohm)	0,5 V eff. + 20%
- Impedância mínima de carga	10 Kohm + 20%
- Corrente máxima actual (para 1 sec. A 50 Hz)	100 mA eff. + 20%
- Resistência do bobinado	400 ohm + 20%
- Campo de frequência	100 Hz : 15 Khz
- Límites de temperatura	-30 +90°C
- Corpo	latão galvanizado
- Caixa de conexões	Faston 6.35 X 0.8
- Grau de protecção	revestimento com resina

DATI PER L'ORDINAZIONE - ORDERING INFORMATION

- Tipo - Type	TM 90-M16	codice-code	00260111
- "	TM 90-M18	"	00260112
- "	TM 90-5/8	"	00260113
- "	TM 90-3/4	"	00260114

PESO - WEIGHT

TM 90-M16	100 gr
TM 90-M18	128 gr
TM 90-5/8	100 gr
TM 90-3/4	143 gr

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