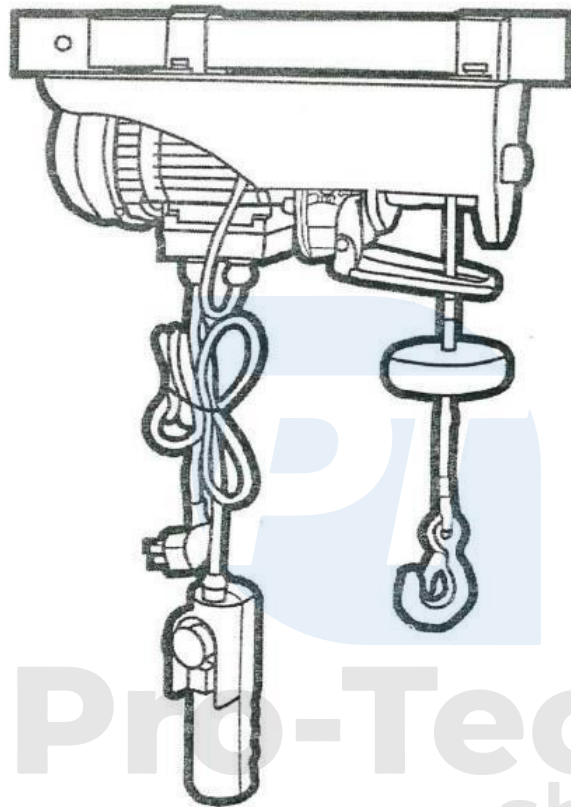


## Electric winch 230V 400kg/800kg



Pro-Tech  
shop

### Instructions for use

Translation of the original instructions



Wear protective gloves!



Read the instructions for use before use.



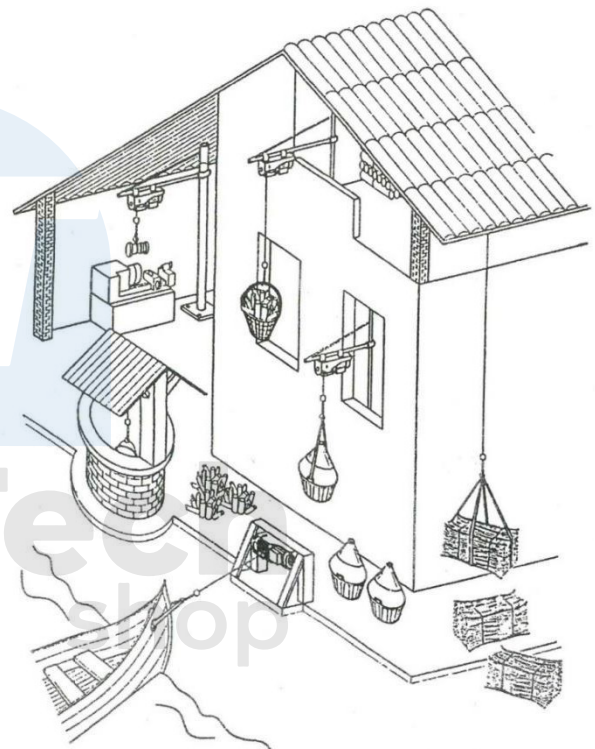
It is forbidden to stay under the load!



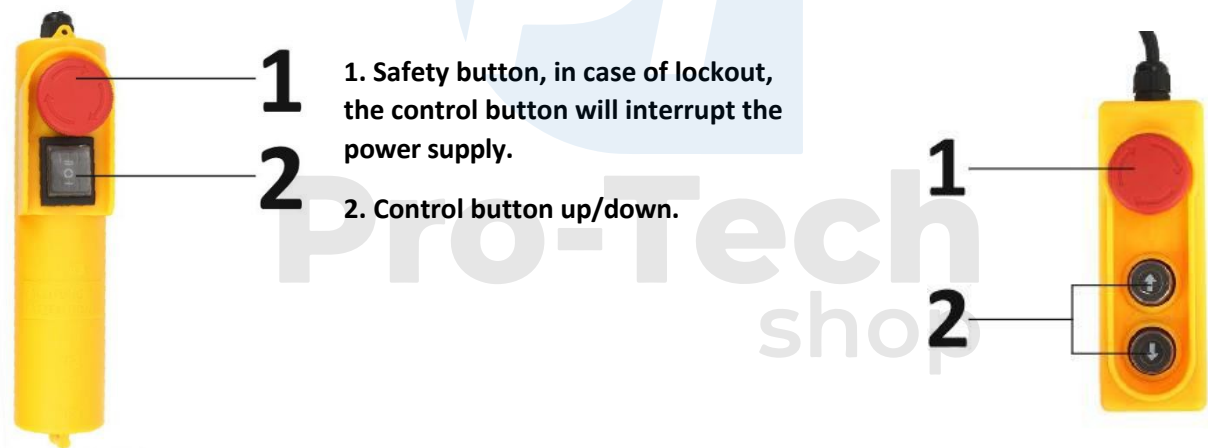
Always wear head protection.

### **Purpose of the winch**

The winch was designed for carrying out construction work or on farms. The equipment can be used to lift loads in controlled conditions. It can also be used for hauling loads, but anchoring with the winch is prohibited. The equipment is not intended for levelling or stabilising structural and load-bearing elements. Nor can it be used for lifting people or animals. The load to be lifted must be constant, you cannot lift loads in which the centre of gravity is moving, such as tanks with liquid or bulk substances. Changing the centre of gravity will destabilise the load! It is also forbidden to leave the winch under the load, as a sling for chandeliers, or decorative elements.



## External description



## Working safely with the winch

Please read all instructions and regulations.

Failure to follow the instructions below may result in electric shock, fire, or serious personal injury.

The term "power tools" used in the text below refers to mains-powered power tools.

Keep the instructions after reading them and hand them in with the reel when you sell it.

### **Personal safety.**

Be careful when working with power tools and carry out each operation with care and attention. Do not use power tools if you are tired or under the influence of drugs, alcohol or medication.

1. Wear personal protective equipment.
2. Avoid unintentionally starting the tool. Make sure the power tool is switched off before inserting the plug into the socket.
3. Avoid unnatural working positions. Care should be taken to maintain a stable working position and balance.
4. Always make sure you can contact medical help by carrying a mobile phone or short wave radio.
5. Never grab the rope while the winch is in operation, there is a danger of catching your hand, which can result in permanent damage!
6. When winding, the operator must be on top, this is a good point to observe the load.
7. Never stand under or in the immediate vicinity of the load! If the load attachment fails, the load will fall, posing a real threat to bystanders or co-workers.

### **Electrical safety**

1. The plug of the power tool must fit into a socket with protective earthing. A power tool plug and socket with protective earthing reduces the risk of electric shock.
2. The equipment should be protected from rain and moisture. Water ingress into the power tool increases the risk of electric shock.
3. Never use the power cord for other activities. Never carry power tools by the cord or use it to hang the equipment. Never pull the plug out of the socket by pulling on the cord. The cord must be protected from high temperatures and kept away from oil, sharp edges, or moving parts of the equipment.
4. If you work with power tools outdoors, use an extension cable that is also suitable for outdoor use.
5. If it is necessary to use power tools in a wet environment, use a current protector. And installation and protection must be carried out by a qualified technician.
6. Do not disassemble the winch or remove its accessories. Each contactor or cover is for protection, removing them greatly increases the risk of working with the equipment.

### **Safety in the workplace**

1. The workplace should be kept clean and well lit. A messy workplace or an unlit work area can cause accidents.
2. Do not use this power tool in a potentially explosive environment that contains, for example, flammable liquids, gases, or fluids. Sparks are produced when using power tools and may cause ignition.

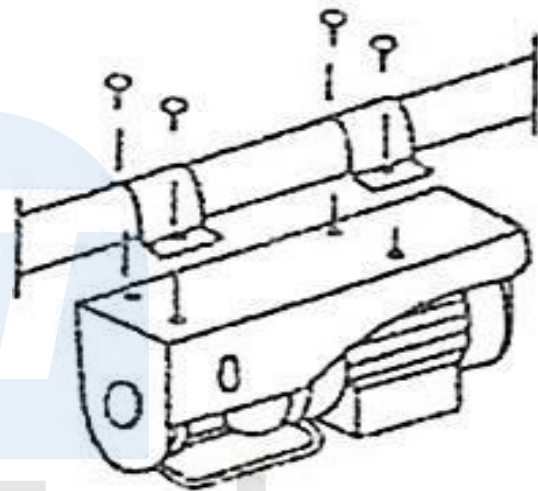
3. There must be no persons standing in the workplace during the lifting process, the release of the load and its fall endangers all persons below.
4. The workplace should be marked and secured against the possibility of unauthorised entry.
5. If the work is carried out in an area where there are other workers, lifting must be carried out using safety equipment. The winch operator is responsible for the stable lifting of the load. The belayer shall observe the area under the load and secure the area against intrusion by other workers.
6. Under no circumstances shall any person or object be under the lifted load or within a distance of at least 2 metres from the edge of the load. Dropping the load on retained objects may cause them to be thrown into the air or dropped, posing a threat to people and property.

### Winch installation

The winch is equipped with clamps that allow it to be attached to the boom beam.

When fitting, make sure all four fixing screws are securely tightened, it pays to use thread adhesive. The vibration generated by the winch can cause the bolts to loosen, which can result in an accident.

The frame on which the winch will be mounted should have a load capacity of at least twice that of the mounted winch. A secure and durable installation must be ensured. The lateral forces acting on the anchor point should be taken into account as they arise when the load swings.



**ATTENTION!** : It is strictly forbidden to attach the winch to the structural elements of the roof or halls on which it is working, damage to the structural elements may result in the collapse of the building!

The winch must be mounted under the roof. Be sure to provide sufficient ventilation, the electric motor generates heat. In addition, a stable place must be provided for the operator of the equipment.

### Electrical installation

When installing the device, be sure to ensure sufficient power supply. As the length of the power cord increases, the cross-section of the power cord must increase. If the cross-section of the power cable is too small, the voltage will drop and as a consequence the current on the cable and the motor winding itself will increase. This effect may be manifested by the inability to lift the load, or even by its falling during lifting.

The electromagnetic brake mechanism does not require a large current and therefore will release if the motor is not supplied with sufficient energy, the load will start to fall while the "up" button is pressed.

Ignoring such a phenomenon creates a dangerous situation and leads to the burning out of the electric motor of the winch.

The electrical installation to power the device should therefore be carried out by an authorised electrician who will calculate the cable diameter taking into account the material and type of conductor used.

If the winch is used in a non-permanent location that requires the use of an extension cable, follow the table below.

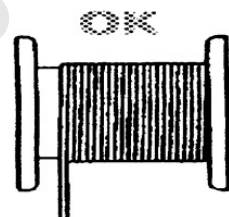
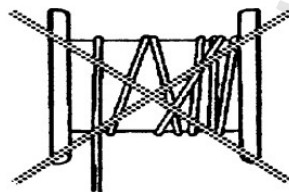
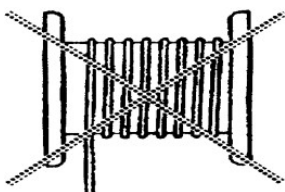
Power cable length	Power cable thickness
Up to 20 metres	2 x cross-section of winch cable
From 20 to 50 metres	4 x cross-section of winch cable
The above conversion factor applies to an extension cable with a copper-type conductor.	

### Using an electric winch

**WARNING** - Please read the following list of rules before use.

**ATTENTION** - Only experienced operators may operate the winch independently! If the operator has no experience, he should work at least 50 hours under the supervision of an experienced person. This experience will enable you to work independently and safely in the future.

1. Electrical sockets must be fully functional, if they are damaged, do not plug tools into them without repairing them first.
2. Be sure to ground the equipment and avoid contact of the plug with water to prevent electric shock.
3. When the machine is switched on, make sure that children and bystanders do not approach the machine.
4. Do not pull the cord when removing the plug.
5. Protect the equipment from frost and cold temperatures.
6. If the winch does not respond and does not lift the load, do not press the winch button again. This means that the weight is too great and should be reduced.
7. Before starting work, check that the metal cable is properly wound around the drum and looks like the picture:



8. Pulling objects or fixings with a winch is strictly forbidden, the rope has elasticity, the energy accumulated in it will cause the object to shoot out when the fixings are released. It is also forbidden to lift stuck objects.
9. Lifting loads of unknown weight is prohibited.
10. It is forbidden to lift loads that are not under the winch, the lateral load applied to the winch can damage it and create dangerous situations.

11. Check the weight of the load to be lifted, it must not exceed the capacity of the winch
12. Leave at least four rope wraps around the drum to minimize the risk of the rope slipping.
13. If the rope wears out or the fibres become damaged, it must be replaced with the original product recommended by the manufacturer.
14. Before connecting the device to the network, make sure all switches are in the correct position (off).
15. When the load is lowered and the stop button is pressed, the load is lowered a few centimetres further. This is due to the phenomenon of inertia and is a normal situation.
16. Before lifting the actual load after installing the winch, perform a load test minimum 10 kg. This allows you to verify the operation of the device over the full range of heights used at the site. The load is applied to tighten the rope. The wire rope used has a natural elasticity, winding it without load will cause tangling.

**- ATTENTION! The device is not equipped with a thermal switch. If the machine is overloaded and the engine is overheating, stop pulling/starting, wait a while until the engine has cooled down completely. The operating time of the motor must not exceed 10 minutes.**

### **Lifting the load**

Be especially careful when lifting the load, the load on the rope is susceptible to wind gusts or swaying, never attach additional ropes to stabilize the load. Follow the following points.

1. Before lifting the load, make sure it is properly secured.
2. The load must be secured to the centre of gravity.
3. If you are working outside the room, make sure the wind does not cause the load to sway. To lift the load, press the control button and the winch will start winding the rope.

When lifting, keep in mind the elasticity of the rope, pulsing the lifting button to reach the desired height is prohibited. This action leads to additional forces on the rope and the boom to which the winch is attached. In addition, it leads to faster wear of the control hitch switch by sparking its contacts.

### **Lowering the load**

Before starting, make sure that there are no persons, animals or objects underneath.

To start triggering, press the controller button. The winch will start unwinding the rope. Be sure to avoid pulsing the control button as in the case of lifting, which has negative consequences for the equipment and safety.

**NOTE:** In the event of a power failure, the electromagnetic drum brake will block the movement of the load. You should immediately inform your co-workers of the situation and secure your work area, a load hanging on a rope is a hazard, do not attempt to lower the load with other equipment or attach it to another winch. Lower the load immediately when power is restored and check the load for correctness before lifting it again.

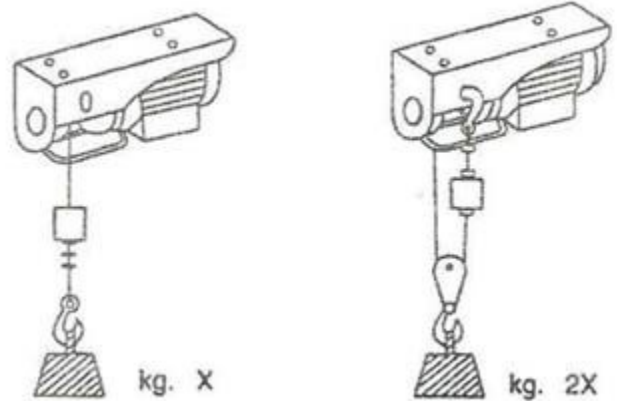


## Rope pulley

During operation, it is permissible to use a pulley gear consisting of a single pulley. It is forbidden to use a pulley consisting of several pulleys, as the forces acting on the winch frame may lead to its damage.

To use the full capacity of the winch, use the rope pulley included in the kit, attach the winch hook to the winch frame in the designated location. The load should be suspended from the pulley.

This configuration will slow the lifting of the load while increasing the winch force.



## Maintenance

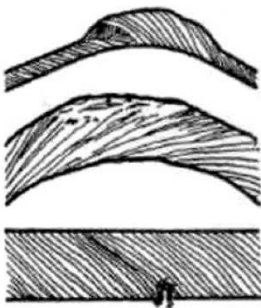
In order to maintain the factory parameters of the winch and to ensure its safe use, use only original spare parts recommended by the equipment manufacturer. Regular maintenance and cleaning of the equipment has a positive effect on the efficiency and service life of the winch. Maintenance and cleaning should only be carried out by an experienced and rested maintenance person. It is forbidden to interfere with the construction and safety features of the winch. Disconnect the equipment from the power supply before carrying out maintenance.

## Cleaning

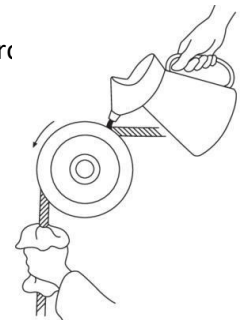
Do not use active chemicals, solvents, pressurized water or high-pressure air to clean the winch. Use compressed air with a pressure not exceeding 2 bar to clean the winch, remove solid dirt with a soft brush and damp cloth. During maintenance, visually inspect the winch frame and rope for damage and cracks.

## Lubrication

When lubricating and corrosion protecting steel elements, ensure that all handles and hooks remain free of lubricants, as these are elements that require good grip and hold.



During maintenance it is necessary to lubricate the winch carrier rollers. This eliminates internal friction during use, thus reducing the risk of wire breakage, protects the rope from corrosion and allows the rope to run more smoothly on the wheels or rollers leading through the device, which allows us to avoid, for example, twisting of the rope and subsequent twisting of the hook block.



For lubrication, use a lubricant designed for wire ropes with containing a penetrating agent that allows the lubricant to penetrate inside the rope and penetrate its internal structures. After lubrication, wipe the rope to remove excess grease that may drip onto the straps or pulleys. In addition, excess grease will lead to dust and dirt settling on the rope, which will negatively affect its service life. When maintaining the rope, it is also necessary to inspect the rope and replace it immediately if cracks are found in its strands.

Moving elements, such as the axis of the end arm, can be lubricated with a technical lubricant based on Teflon or graphite.



## Storage/transport

If it is necessary to store the winch out of the operating season, maintenance activities should be carried out. Store the winch in a dry place with as constant a temperature as possible, out of reach of children and unauthorised persons.

If transport is unavoidable, transport the equipment only in the luggage compartment of the vehicle. The load should be secured against movement with transport belts or ropes. The winch rope should be fully wound around the drum.

## Technical specifications

MODEL	M80788	M80789	M80790	M80791	M80793
Maximum capacity 1 rope	125 kg	150 kg	300 kg	400 kg	500 kg
Maximum capacity 2 ropes	250 kg	300 kg	600 kg	800 kg	999 kg
Range 1 rope	12m	12m	12m	12m	12m
Range 2 rope	6m	6m	6m	6m	6m
Rope diameter	3 mm	3 mm	4.5 mm	5 mm	6 mm
Speed 1lano/2 ropes	10/5 m/min	10/5 m/min	10/5 m/min	10/5 m/min	10/5 m/min
Current circuit	2,3A	2,4A	4,56 A	5,65 A	6,96 A
Maximum performance	540W	550W	1200W	1300W	1600W
Voltage	230V	230V	230V-50Hz	230V-50Hz	230V-50Hz
Noise level (LwA)	<71 dBA	<71 dBA	<71 dBA	<71 dBA	<71 dBA
Weight	11 kg	12 kg	18 kg	19,5 kg	33,2 kg

The company guarantees the efficient operation of the equipment in accordance with the technical and operating conditions described in the operating instructions. The warranty period is 24 months from the date of purchase. If during the warranty period you discover a malfunction of the equipment, contact the service or dealer immediately.

1. The warranty covers damages caused by the discovery of hidden defects in materials, irregularities in installation, or irregularities caused by poor manufacturing technology.

Warranty service does not include:

1. Components and consumables subject to natural wear and tear.
2. The activities listed in the user manual that the user is required to perform.
3. Damage caused by fire, lightning, power surges and other accidental events.
4. Mechanical damage caused by improper operation. The

warranty is void in the event of:

1. Failure to comply with the operating instructions.
2. Work in conditions that are not consistent with the intended use of the equipment.
3. Working without or with incorrect consumables
4. Making structural changes or incorrectly connecting equipment.
5. Breaking the seal.

**The warranty covers manufacturing defects. Damage caused by overloading, wear and tear, or neglect is not covered by warranty.**