IP (Ingress Protection) Ratings Guide ايران مدار

SOLIDS

حامدات

Protected against a solid object greater than 50 mm such as a hand.

حفاظت در برابر جامدات با قطر بیش از ۵۰ میلی متر WATER

بانعات

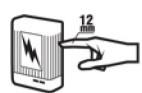
1



Protected against vertically falling drops of water. Limited ingress permitted.

حفاظت در برابر ریزش آپ

2



Protected against a solid object greater than 12.5 mm such as a finger.

حقاظت در برابر جامدات با قطر بیش از ۱۲٫۵ میلی متر 2

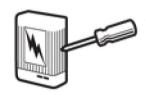


Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.

حفاظت در برابر ریزش آب در صورت گج شدن تا ۱۵ درجه نسبت به حالت معمول

for three minutes.

3



Protected against a solid object greater than 2.5 mm such as a screwdriver.

حفاظت در برابر جامدات با قطر بیش از ۲٫۵ میلی متر 3



Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted

حفاظت در برابر اسیری آب

4



Protected against a solid object greater than 1 mm such as a wire.

حفاظت در برابر جامدات با قطر بیش از ۱ میلی متر



Protected against water splashed from all directions. Limited ingress permitted.

حفاظت در برابر باشیدن آب

5



Dust Protected.
Limited ingress of dust
permitted. Will not
interfere with operation
of the equipment.
Two to eight hours.

حفاظت در برابر گرد و غبار ، نفوذ محدود بدون پسماند مضر



Protected against jets of water. Limited ingress permitted.

حفاظت در برابر چت اسپری آپ



Dust tight. No Ingress of dust. Two to eight hours.

ضد گرد و غبار



Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.

حفاظت در برابر جت اسپری شدید

Rating Example:



INGRESS PROTECTION

Iran Madar Co.

7



Protection against the effects of immersion in water between 15 cm and 1 m for 30 minutes. مقاطت در برابر اثرات غوطه

در مایعات تا عمق ۱ متر بمدت ۳۰ دقیقه

8



Protection against the effects of immersion in water under pressure for long periods.

حقاظت در برابر غوطه وری در ایران مدار تا حداکثر ممق ۲ مثر و حداکثر زمان ۲۴ سامت

IP Specified by Wikipedia

Level	Protected against	Effective against	Details
0	Not protected	_	_
1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect.	Test duration: 10 minutes Water equivalent to 1 mm rainfall per minute
2	Dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.	Test duration: 10 minutes Water equivalent to 3 mm rainfall per minute
3	Spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.	Test duration: 5 minutes Water volume: 0.7 litres per minute Pressure: 80–100 kPa
4	Splashing of water	Water splashing against the enclosure from any direction shall have no harmful effect.	Test duration: 5 minutes Water volume: 10 litres per minute Pressure: 80–100 kPa
5	Water jets	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects.	Test duration: at least 3 minutes Water volume: 12.5 litres per minute Pressure: 30 kPa at distance of 3 m
6	Powerful water jets	Water projected in powerful jets (12.5 mm nozzle) against the enclosure from any direction shall have no harmful effects.	Test duration: at least 3 minutes Water volume: 100 litres per minute Pressure: 100 kPa at distance of 3 m
7	Immersion up to 1 m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).	Test duration: 30 minutes 19The lowest point of enclosures with a height less than 850 mm is located 1000 mm below the surface of the water, the highest point of enclosures with a height equal to or greater than 850 mm is located 150 mm below the surface of the water.
8	Immersion beyond 1 m	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. However, with certain types of equipment, it can mean that water can enter but only in such a manner that it produces no harmful effects.	Test duration: continuous immersion in water Depth specified by manufacturer, generally up to 3 m. We at Iran Madar specify the depth 2 meters and the time less than 24 hours.