NEMA Enclosure Rating Quick Card

U.S. industrial enclosures | Nonhazardous-location selection aid

START WITH EXPOSURE: Rain is not windblown dust; washdown is not corrosion resistance.

01 ENCLOSURE TYPES AT A GLANCE

TYPE	LOCATION	DESIGNED PROTECTION (SUMMARY)	TYPICAL USE
1	Indoor	Falling dirt; limited protection from accidental contact	Dry electrical room
3	Indoor / outdoor	Rain, sleet, snow, windblown dust; external ice	Dusty outdoor site
3R	Indoor / outdoor	Rain, sleet, snow; external ice; not windblown dust	Outdoor service
4	Indoor / outdoor	Windblown dust; splashing and hose-directed water	Washdown area
4X	Indoor / outdoor	Type 4 plus added corrosion resistance	Corrosive washdown
12	Indoor	Circulating dust, falling dirt, dripping noncorrosive liquids	Industrial controls
13	Indoor	Dust; spraying water, oil and noncorrosive coolant	Machinery / coolants

02 THREE DIFFERENCES THAT PREVENT WRONG ORDERS

3 vs 3R

Type 3 includes windblown-dust protection; Type 3R does not.

4 vs 4X

Type 4X adds specified corrosion protection to Type 4.

12 vs 13

Type 13 covers spraying oil and noncorrosive coolant.

SPECIFICATION / INSTALLATION CHECK

Verify the listed or marked rating of the completed enclosure. Field-cut openings, conduit fittings, vents, gaskets, doors and other accessories can change the protection achieved. Follow the manufacturer installation instructions.

NEED AN ENCLOSURE OR REPLACEMENT PART?

Send enclosure label/model, location, exposure (water, dust, chemicals), dimensions, required rating and quantity to JW Electrical Supply.

TECHNICAL REFERENCES

NEMA enclosure-type definitions

Eaton electrical enclosure catalog

General selection aid only. Type is not a one-to-one IP equivalent or hazardous-location approval.