

Formule tecniche
Technical formulas
Formules techniques
Technische Formel

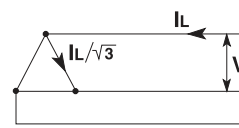
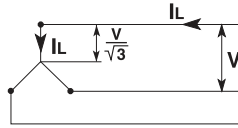
Corrente assorbita in linea

Absorbed current with the mains

Courant absorbé en ligne

Richtstromaufnahme

$$I_L = \frac{P_n}{\sqrt{3} \cdot V \cdot \eta \cdot \cos\varphi}$$



Coppia motrice

Driving torque

Couple motrice

Antriebsdrehmoment

$$T = \frac{P_n}{\omega} [\text{N} \cdot \text{m}]$$

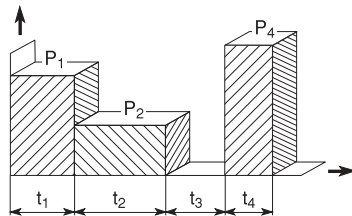
$$T = 0,955 \cdot \frac{P_n}{n} [\text{Kg} \cdot \text{m}]$$

Potenza termicamente equivalente in servizio intermittente

Power termally equivalent to a continue working in case of intermittent working

Puissance thermiquement equivalent en service intermittent

Waermaequivalentleistung mit Aussetzbetrieb



$$P_t = \sqrt{\frac{P_1^2 \cdot t_1 + P_2^2 \cdot t_2 + P_4^2 \cdot t_4}{t_1 + t_2 + t_4 + t_3 / 4}} [\text{W}]$$

$$0,3 \cdot P_n \leq P_{1,2,4} \leq 1,5 \cdot P_n$$

Potenza apparente

Apparent power

Puissance apparent

Scheinleistung

$$P_a = \sqrt{3} \cdot V \cdot I_L [\text{VA}]$$

Energia

Energy

Énergie

Energie

dove • where • où • wo:

$$E = P \cdot t [\text{Joule}]$$

$$E = E_m + E_r + E_t [\text{J}]$$

$$E_m = \frac{1}{2} \cdot J_m \cdot \omega^2 [\text{J}]$$

$$E_r = \frac{1}{2} \cdot J_r \cdot \omega^2 [\text{J}]$$

$$E_t = \frac{1}{2} \cdot m_t \cdot N_i^2 [\text{J}]$$

Tempo di avviamento

Starting time

Temps de la mise en marche

Anlaufzeit

$$t = \frac{(J_m + J_L) \cdot \omega}{C_m - C_L}$$

$$J_m [\text{kgm}^2] \quad J_r [\text{kgm}^2] \quad m_t [\text{kg}]$$

$$] N_i [\text{m/s}] = \text{velocità lineare}$$

Coppia frenante (*)

Braking torque (*)

Couple de freinage (*)

Bremsdrehmoment (*)

$$T_f [\text{N} \cdot \text{m}]$$

$$T_f = \frac{E}{\omega \cdot t_f}$$

(*) Il valore di coppia frenante è calcolato in eccesso trascurando gli attriti, e in regime stazionario

(*) The value of the brating torque is calculated in excess, not considng frictions and in a steady-state condition

(*) La valeur de couple de freinage est calculée par excès en régime stationnaire, en négligeant les frottements

(*) Das-Bremsmoment, sin stationarem Betrieb und ohne Berücksichtigung des Reibungskoeffizienten berechnet wird

P_n [W]	potenza resa nominale	rated power	puissance nominale	Nennleistung
V [V]	tensione concatenata	voltage between lines	tension à triangle	Dreleckspannung
η	rendimento	efficiency	rendement	Wirkungsgrad
$\cos\varphi$	fattore di potenza	power factor	facteur de puissance	Leistungsfaktor
ω [rad/s]	velocità angolare	angular speed	vitesse angulaire	Winkelgeschwindigkeit
n	giri/min	rpm	tr/min	min ⁻¹
t [s]	tempo	time	temps	Zeit
J_m [Kg·m ²]	momento d'inerzia motore	moment of inertia of the motor	moment d'inertie moteur	Schwungmoment des Motors
J_L [Kg·m ²]	momento d'inerzia carico	moment of inertia of the load	moment d'inertie charge	Schwungmoment der Cast
C_m	coppia motore	motor torque	couple de moteur	Antriebsdrehmoment
C_L	coppia carico	load torque	couple de charge	Lastdrehmoment
t_f [s]	tempo desiderato di frenata	desired braking time	temps de freinage schuait	Gewünschte Bremszeit
m	motore	motor	moteur	Motor
r	carico rotante	rotary load	charge en rotation	Drehlast
t	carico traslante	shifting load	charge en translation	Schutzlast