

G043+G045 Online Test

Ref375

Which is correct formula?

A	$J = mr^2/2$, $\Delta n = 9.55 T \Delta t / J$	B	$J = mr/2$, $\Delta n = 9.55 T \Delta t / J$
C	$J = m^2/r$, $\Delta n = 9.55 T \Delta t / J$	D	
Answer			

Ref377

Temperature rise by resistance method is

A	$T_2 = (R_2/R_1)t_1 - 234$	B	$T_2 = (R_1/R_2)t_1 + 234$
C	$T_2 = (R_2/R_1)(t_1 + 234)$	D	$T_2 = (R_2/R_1)(234 + t_1) - 234$
Answer			

Ref379

A 440V 4 poles three phase 50 HZ induction motor has its winding delta connected & its rotor winding star connected. The standstill voltage measured between slip ring with the rotor open circuit 218V. The stator resistance / phase is 0.6 ohm and the stator reactance / phase is 3 ohm. The rotor resistance per phase is 0.05 ohm and rotor reactance per phase is 0.25 ohm. Calculate the stator 60A current when slip rings are short circuited to start the motor.

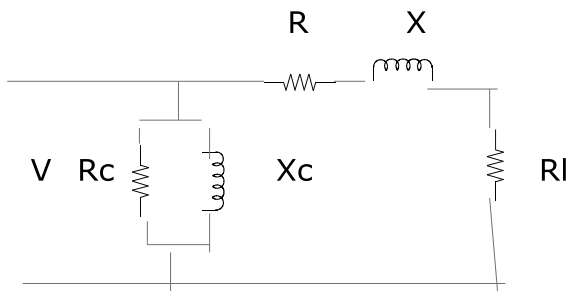
A	160A	B	200A
C	300A	D	71.42A
Answer			

Ref381

No load test is performed to determine.

A	Core parameter	B	Winding parameter
C	Load parameter	D	35%
Answer			

Ref383



$$R = 1.5\Omega, X = j 6 \Omega \quad R_c = 900 \Omega \quad X_c = j 110 \Omega \quad R_I = 48 \Omega$$

Calculate shaft torque.

A	12 N-m	B	24 N-m
C	18 N-m	D	6.04 N-m
Answer			

Ref385

Which one is not a reduced voltage starting method?

A	Star/Delta	B	Auto transformer
C	Primary resistance starter	D	Direct online starter
Answer			

Ref387

Both AC & DC supply are needed to be provided to

A	Synchronous motor	B	Induction motor
C	Wound rotor motor	D	DC motor
Answer			

Ref389

A three phase 6000 KW 4 KV 180 rpm 60 HP synchronous motor has $X_s = 1.2 \Omega$. Machine angle is 1 degree. $E_f = 2.4$ KV. Calculate mechanical power.

A	6300 HP	B	3150 HP
C	1000 HP	D	2000 HP
Answer			

Ref391

Over excitation makes the power factor of a synchronous machine to become

A	Unity	B	Leading
C	Lagging	D	
Answer			

Ref393

A synchronous condenser is rated at 160MVAR 16 KV 1200 rpm, 60HZ. It has a synchronous reactance of 0.8 pu and is connected to 26KV line. Calculate the value of E_f so that the machine (a) absorb 160MVAR (b) deliver 120 MVAR

A	1850V, 1148V	B	900 V, 600 V
C	500V, 1200 V	D	1200V, 1800 V
Answer			