



**Microscientifica MG30**  
**Multifunction Microprocessor Relays**

**Parametri  
inseriti**

**Settings**

Tysen		m	
NodAd	1	-	Device identification number
Fn	50	Hz	System frequency
In	1500	Ap	Rated primary current of phase
Kv	6.3	-	System PT ratio (690V/110V)
Uns	110	V	Secondary nominal PT Voltage
En	500	Ap	– not used – Secondary voltage N to G
Ib	0,7	In	Generator rated current
F(I>)	D	-	First element function characteristic
U/I>	ON	-	Automatic voltage restrain
I>	1.14		Overcurrent threshold of first element
tl>	10	s	Independent time delay
U/I>>	ON	-	Automatic voltage restrain
I>>	3	Ib	Overcurrent threshold of second element
tl>>	0.05	s	Independent time delay
1Is	0.5	Ib	Continuous negative sequence current lev.
Ks	5	s	Time coefficient of $I(\exp 2)t = \text{const.}$
tcs	10	s	Cooling time
2Is	0.03	Ib	Negative sequence current alarm lev.
t2Is	1	s	Independent time delay
Ir>	0.08	In	Trip level
tlr>	3	s	Independent time delay
K1	300	%Zb	Circle diameter
K2	50	%Zb	Circle offset
tz	0.2	s	Independent trip time delay
ti	0	s	Integration time
Un	-	1u	First element operation mode

**Compagnia Tecnica Motori S.p.A.**

1u	10	%En	First element operation level
t1u	10	s	Independent time delay
Un	+	2u	Second element operation mode
2u	10	%En	Second element operation level
t2u	10	s	Independent time delay
Fn	-	1f	Frequency first element operation mode
1f	3	Hz	Frequency first element operation level
t1f	10	s	Independent time delay
Fn	+	2f	Freq. second element operation mode
2f	3	Hz	Frequency second element operation level
t2f	5	s	Independent time delay
Tc	60	m	Warming up time constant
Ta/n	100	%	Prealarm temperature
W<	0	Wb	Trip level
tW<	0.1	s	Independent time delay
1Z	0.5	Zn	Underimpedance first element trip level
t1Z	1	s	Independent time delay
2Z	1	Zn	Underimpedance second elem. trip level
t2Z	2	s	Independent time delay
1*>	1.2	pU	Overexcitation V/Hz minimum pick up level
K	0.5	-	Curve time multiplier
2*>	1.2	pU	Overexcitation V/Hz trip level
t2*	5	s	Independent time delay
1IO	10	%On	Stator ground protection
t1IO	2	s	Independent time delay
2IO	20	%On	Stator ground protection
t2IO	3	s	Independent time delay
60FL	ON	-	PT fuse failure
IC	ON	-	Inadvertent generator energization
tBF	0.05	s	Breaker failure protection trip time delay

Output Relay Configuration

l>	-	1Φ	-
tl>	4	t1Φ	-
l>>	-	2Φ	-
tl>>	4	t2Φ	-
1ls	-	1lo	-
2ls	-	t1O	4
tlr>	1-2-3	2lo	-
FL	-	t2IO	-
tW<	-	IC	-
1U	3	60FL	-
2U	3	tBF	-
1f	2	tFRes	A
2f	2	2A=	-
T>	-	t2=	OFF
Ta/n	-	3A=	-
1Z	-	3B=	-
t1Z	-	4B=	-
2Z	-		
t2Z	-		