

VOLTAGE DROP

CIRCUITS	VOLTAGE	FORMULAS	RESULT	
3 PHASE	220 / 380	$\%e = \frac{100 L.N.}{K.S.U^2} = \frac{10 L.N (kW)}{56.S.(380)^2}$	$0,0124 \frac{L.N}{S}$	
1 PHASE		$\%e = \frac{200 L.N.}{K.S.U^2} = \frac{2 \times 10 L.N (kW)}{56.S.(220)^2}$	$0,074 \frac{L.N}{S}$	
2 PHASE		$\%e = \frac{100 L.N.}{2 K.S.U^2}$ $\frac{100 L.N.}{K.S.U^2} = \frac{15.10 L.N.}{56.S.(220)^2}$	$0,056 \frac{L.N}{S}$	
3 PHASE		24 / 42	$\%e = \frac{100 L.N.}{K.S.U^2} = \frac{10 L.N (kW)}{56.S.(42)^2}$	$1 \frac{L.N}{S}$
1 PHASE			$\%e = \frac{200 L.N.}{K.S.U^2} = \frac{2.10 L.N (kW)}{56.S.(24)^2}$	$6.2 \frac{L.N}{S}$

%e = VOLTAGE DROP.....(%)  
 N = POWER.....(kW)  
 U = VOLTAGE.....(Volt)

L = LINE DISTANCE.....(m)  
 S = CONDUCTOR CROSS-SECTION.....(mm<sup>2</sup>)  
 K = COEFFICIENT OF CONDUCTIVITY .....(m/mm<sup>2</sup>)