E3 on one page

DATA BOOKLET

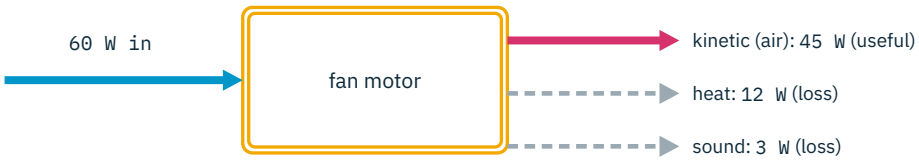
page 4

$E_e = VIt$
electrical energy

$P = E/t$
power

$P = VI = V^2/R = I^2R$
electrical power

$\eta = E_{out}/E_{in} = P_{out}/P_{in}$
efficiency



Energy audit: outputs add up to the input

UNITS

J	energy (kJ, MJ)
W	power = J per second
s	time in seconds
η	no unit; × 100 for %

FORMULA CHOICE

V, I	$P = VI$
V, R	$P = V^2/R$
I, R	$P = I^2R$
chain	multiply efficiencies

SHORT CIRCUIT · EXAMINER TIPS

- Time in seconds.
- Efficiency = useful out ÷ in; never above 1.
- Audits must balance.
- Climate change answers: link to greenhouse gases.