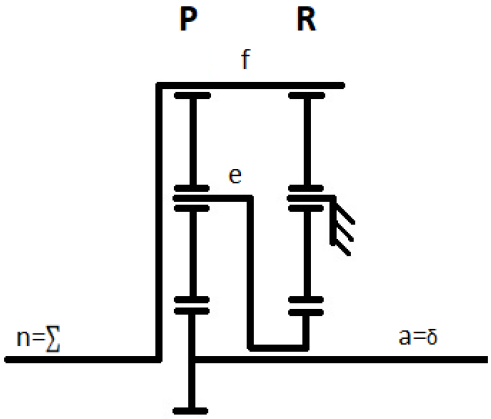


KINEMATIKA:

	n	e	a
P	$-i^P$	$-i^P-1$	1
R	$-i^R$	1	0

$Z_K = 70$

$Z_{P1} = 23$

$Z_{P1} = 25$

$$i^P = \frac{Z_K}{Z_P} * (-1)^j = -3{,}043$$

$$i^R = \frac{Z_K}{Z_P} * (-1)^j = -2{,}8$$

$$\Delta = -i^P - (-i^R) * (i^P - 1) = -(-3{,}043) - \big(-(-2{,}8)\big) * (-3{,}043 - 1) = 14{,}363$$

$$\Delta_n = \begin{vmatrix} 1 & i^P - 1 \\ 0 & 1 \end{vmatrix} = 1$$

$$\Delta_e = \begin{vmatrix} -i^P & 1 \\ -i^R & 0 \end{vmatrix} = i^R = -2{,}8$$

$$\overline{\omega_n} = -\frac{\Delta_n}{\Delta} = -\frac{1}{14{,}363} = -0{,}06962$$

$$\overline{\omega_e} = -\frac{\Delta_e}{\Delta} = -\frac{-2{,}8}{14{,}363} = -0{,}19495$$

$$i = \frac{1}{\overline{\omega_n}} = -14{,}363$$

Diferenciál na vstupu

$$i_{an} = i^f_{an} * i^e_{an}$$

$$i^e_{an} = (i^e_{af})_P * (i_{fn})_R$$

$$(i^f_{ae})_P = i^k_{pr} = 1 - i^r_{pk} = 1 - i^P$$

$$(i^e_{af})_P = i^r_{pk} = i^P$$

$$(i_{en})_R = i^r_{pk} = i^R$$

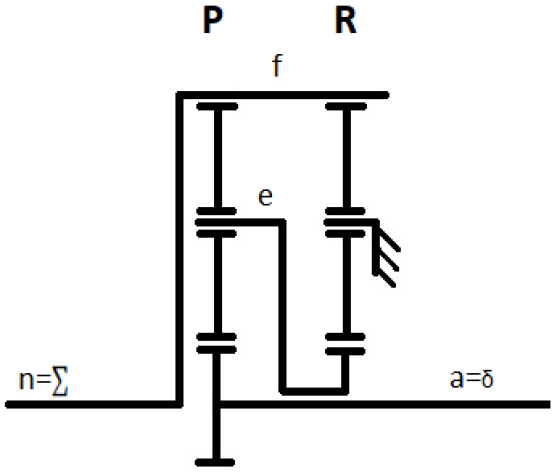
$(i_{fn})_R = 1$

$i_{an}^f = (1 - i^P) * i^R = \big(1 - (-3{,}043)\big) * (-2{,}8) = -11{,}32$

$i_{an}^e = i^P * 1 = -3{,}043$

$\frac{i_{an}^f}{i_{an}^e} > 0$ *SPS je bez cirkulace výkonu*

$i = i_{an}^f + i_{an}^e = -11{,}32 + (-3{,}043) = \mathbf{-14{,}363}$



ÚČINNOST:

$a = \delta; n = \sum$

$\eta_P = \eta_R = 0{,}97$

$\Delta = 14{,}363$

$\Delta_n = 1$

$\Delta_e = -2{,}8$

$i = -14{,}363$

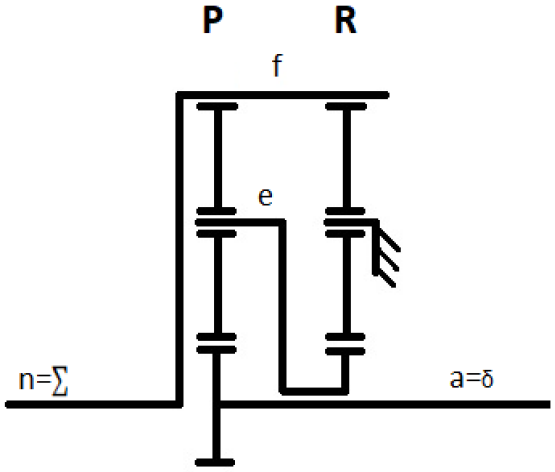
$$i = -\frac{\Delta}{\Delta_n} = -\frac{i^R * (i^P - 1) - i^P}{1}$$

P	R
$exp = sgn\left(\frac{i^P}{i}\right) * sgn\left(\frac{\partial i}{\partial i^P}\right)$ $sgn\left(\frac{i^P}{i}\right) = sgn\left(\frac{-3{,}043}{-14{,}363}\right) = +$ $sgn\left(\frac{\partial i}{\partial i^P}\right) = sgn\left(-(i^R - 1)\right)$ $= sgn\left(-(-2{,}8 - 1)\right) = +$ $exp = + * + = +$	$exp = sgn\left(\frac{i^R}{i}\right) * sgn\left(\frac{\partial i}{\partial i^R}\right)$ $sgn\left(\frac{i^R}{i}\right) = sgn\left(\frac{-2{,}8}{-14{,}363}\right) = +$ $sgn\left(\frac{\partial i}{\partial i^R}\right) = sgn\left(-(i^P - 1)\right)$ $= sgn\left(-(-3{,}043 - 1)\right) = +$ $exp = + * + = +$

	n	f	a
P	$-i^P * \eta_P$	$i^P * \eta_P - 1$	1
R	$-i^R * \eta_R$	1	0

$$m = \frac{\Delta^\eta}{\Delta_n^\eta} = \frac{i^R * \eta_R * (i^P * \eta_P - 1) - i^P * \eta_P}{1} = 13{,}685$$

$$\eta = -\frac{m}{i} = -\frac{13{,}685}{-14{,}363} = \mathbf{0{,}953}$$



MOMENTY:

$\sum M = 0$

$\overline{M_n} = m = 13{,}685$

$\overline{M_{reakce}} = -\overline{M_a} - \overline{M_n} = -1 - 13{,}685 = -14{,}685$

	P			R			
	p	r	k	p	r	k	a
P	$1 - i^P * \eta_P$	1	0	0	0	0	0
	$i^P * \eta_P$	0	1	0	0	0	0
R	0	0	0	$1 - i^R * \eta_R$	1	0	0
	0	0	0	$i^R * \eta_R$	0	1	0
e	0	1	0	1	0	0	0
∑=n	0	0	1	0	0	1	-m
$\overline{\boldsymbol{M}}$	**-1**	**3,952**	**-2,952**	**-3,952**	**14,685**	**-10,733**	